

2020  
INTERNATIONAL  
MATH CONTEST

# Practice Problems

## Grade 5

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## IMC 2019 Grade 5

1. Emily has four cards marked 2, 0, 1, and 9. What is the smallest four digit number that Emily can make with her cards?

.....



2. Calculate:  $\left(5\frac{2}{5} - \frac{3}{5}\right) \div \frac{4}{5}$

.....

3. Mary cut a rectangular piece of paper into two triangles with sides 9, 40, and 41 cm. Find the area of the rectangular piece of paper before cutting.



.....

4. Find the value of  $x$ , if  $\frac{1}{2}x + 5\frac{1}{2} = 14\frac{1}{2}$

.....

5. Adam the Ant and Anna the Ant dared each other to grab a moving bicycle wheel. Adam the Ant hung on for 20 seconds, in which time the wheel made 30 turns; then, he fell off. Anna the Ant hung on 12 seconds longer than Adam the Ant. How many times did she spin around on the bicycle wheel?



6. Find the covered number:



7. Fifteen elves made some identical cakes for a party. Each elf ate half of a cake, one-fifth of a cake, and a third piece, which was six times smaller than the second piece. Three cakes were left untouched. How many cakes did the elves make?



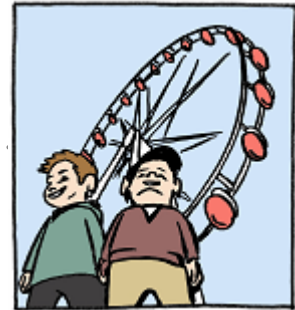
8. One chocolate bar can be used to create one chocolate rabbit with some chocolate left over. The leftovers of seven bars can be used to create two chocolate rabbits without any chocolate left over. How many chocolate rabbits can be created from 35 chocolate bars?

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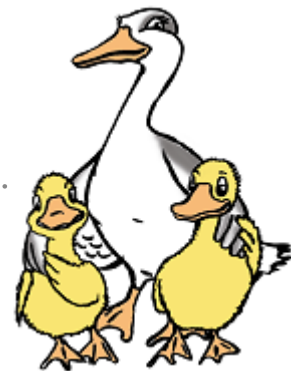
9. All cabins on the Giant Ferris Wheel are numbered in order starting from the number 1. Jack came and sat in cabin 48. Jim skipped the next 15 cabins and sat in cabin 2. How many cabins are there?

.....



10. Mother Goose's twin sons, Winken and Blinken, were born on the same day of the year as their mom. Two years ago, the sum of all their ages was 19. Today, Mother Goose is 3 times as old as Winken. How old is Blinken today?

.....



11. Alice used  $9\text{ cm} \times 9\text{ cm} \times 9\text{ cm}$  cubes to build a tower which is 12 cubes tall, 4 cubes wide and 3 cubes long. Then, she decided to make her tower taller by taking apart one of the side layers to build a few more layers on the top of the tower. What is the smallest possible height, in centimeters, of the new tower?

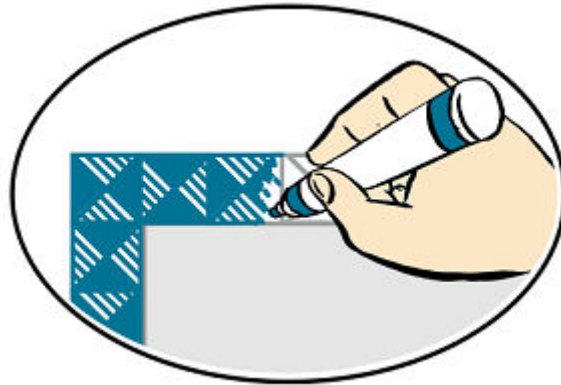
.....



- 
12. All the unicorns on Rainbow Island are either green or yellow. Every time the clock strikes midnight, some of the unicorns change their color. Yesterday, there were 6 green unicorns for every 5 yellow ones. Today, there are 3 green ones for every 4 yellow ones. What is the smallest possible number of unicorns living on Rainbow Island?



- .....
13. As a present for Mother's Day, Mary wants to decorate a 1-inch-wide frame around a 6-inch by 9-inch photo of her mom. Mary paints each square inch with alternating striped and solid triangles, as shown. How many striped triangles will Mary paint?



- .....
14. The Ancient Wizard Albus owns 3 ancient Clocks of Perpetual Motion. Every day, Clock #1 runs 20 minutes fast; Clock #2 runs 30 minutes fast, and Clock #3 runs 40 minutes fast. He sets all three clocks to the correct time and leaves to visit his friend. After many days, he returns home and, to his surprise, finds all 3 clocks showing the correct time again! What is the fewest possible number of days Albus could have spent away from home?



## Answers

Question No.	Answer
1	The smallest four digit number that Emily can make is 1029 or 1026 or 1,029 or 1,026.
2	6
3	The area of the rectangular piece of paper is 360 cm <sup>2</sup> .
4	$x = 18$
5	Anna the Ant spun around the bicycle wheel 48 times.
6	The covered number is 2038 or 2,038.
7	The elves made 14 cakes.
8	45 chocolate rabbits.
9	There are 62 cabins.
10	Blinken is 5 years old.
11	The smallest possible height is 144 centimeters.
12	The smallest possible number of unicorns is 77.
13	Mary paints 68 striped triangles.
14	The fewest possible number of days is 72.

# Grade 5

## IMC 2018

1. Rachel has four cards marked 2, 0, 1, and 8. What is the greatest four digit number that Rachel can make with her cards?

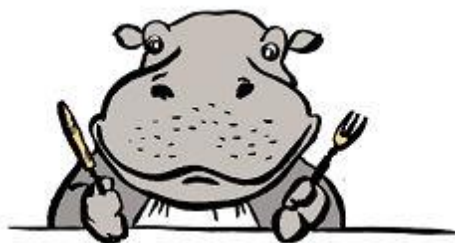


- 
2. Find the value of  $x$ , if :

$$x - 3\frac{1}{2} = 4\frac{1}{2}$$

- 
3. How long is the rectangle if its width is 6 inches and its area is 42 square inches?

- 
4. A very hungry hippo can eat 25 kilograms of grass in 50 minutes. How many minutes will it take the hippo to eat 60 kilograms of grass?



- 
- 5.

Calculate:  $\left(7\frac{4}{5} - \frac{3}{5}\right) \cdot 1\frac{2}{3}$

- 
6. Emily is playing a game where she receives 2 points as soon as she solves three puzzles correctly. For every ten correctly solved puzzles, Emily earns 3 additional points. How many points did Emily receive if she solved 30 puzzles in all?



- 
7. There were 16 more frogs in Green Pond than in Blue Pond. All the frogs from Blue Pond jumped into Green Pond. Now the total number of frogs in Green Pond is 80. How many frogs were there originally in Green Pond?



- 
8. Find the missing number:



- 
9. An alarm clock is slow. It falls behind 4 minutes every 24 hours. If the clock was showing the correct time at 6 : 00 this morning, how many seconds ahead was the clock at 10 : 00 last night?



- 
10. Twenty comic book fans started a club. The next day and every day after that, three new members joined the fan club. On November 30<sup>th</sup>, the club had 71



members at the end of the day. On what date in November was the fan club formed?



- 
11. Aladdin found a cave filled with boxes of gold, measuring 2 inches  $\times$  2 inches  $\times$  2 inches, and boxes of silver, measuring 1 inch  $\times$  1 inch  $\times$  1 inch. However, Aladdin brought only one box measuring 6 inches  $\times$  6 inches  $\times$  7 inches with him. He filled it with as many boxes of gold as would fit, then put as many boxes of silver as would fit in the remaining space. How many boxes of treasure did Aladdin take?



- 
12. Sheila collects Pokemon cards. As of 2018, she has a Mewtwo card that is twice as old as her Snorlax card. Two years ago, her rare Raichu card was five times as old as the Snorlax card. If the Raichu card is seven years older than the Mewtwo card, in what year was the Raichu card made?



- 
13. A cabinet has two sliding doors of different sizes. When the cabinet is fully closed, they overlap by two-fifths of the width of the smaller door. When both doors are slid to one side, the part of the longer door that is not behind the shorter one is half as wide as the original overlap, and the open portion of the cabinet is 36 inches wide. What is the width of the whole cabinet?



- 
14. Queen Laetitia is sorting her gem collection. She starts by placing some of her diamonds into two boxes. In every box after the first two, the Queen puts as many diamonds as in the previous two boxes combined. If there are 30 diamonds in the fourth box, and 128 diamonds in the seventh box, how many diamonds did Queen Laetitia place in the tenth box?



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**Answers**

Question No.	Answer
1	The greatest four digit number that Rachel can make is 8210.
2	8
3	The rectangle is 7 inches long.
4	It will take 120 minutes.
5	12
6	Emily received 29 points.
7	There were 48 frogs in Green pond, originally
8	The missing number is 1817.
9	The clock was 80 seconds ahead.
10	The fan club was formed on November, 13.
11	Aladdin took 63 boxes of treasure.

12	The Raichu card was made in the year 2001.
13	The width of the whole cabinet is 108 inches.
14	Queen Laetitia placed 542 diamonds in the tenth box.

# Grade 5

## IMC 2017

1. A cat and dog sing a song. The dog sings "Woof!" five times for every two times the cat sings "Meow!" If the cat sings "Meow!" 28 times, how many times did the dog sing "Woof!"?



- 
2. Calculate:

$$\left(3\frac{2}{5} - 2\frac{4}{5}\right) \cdot \left(7 - \frac{1}{3}\right)$$

- 
3. Harry and Luna together ate 56 Chocolate Frogs. Harry ate 6 more Chocolate Frogs than Luna. How many Chocolate Frogs did Luna eat?



4. Find the value of  $x$ , if  $\frac{1}{5}x - 10 = 5$
-

5. A boy has 140 toy soldiers. He put 14 soldiers in the fortress and divided the rest of the soldiers into 14 equal groups. If he used 3 of the groups as attackers, how many toy soldiers are attackers?



- 
6. Find the missing number:



- 
7. Five years ago, David was three times as old as Julia was. In 2 years, David will be twice as old as Julia will be. How old is David now?



- 
8. Sir Cadogan likes to change his password three times per day (every eight hours). He uses his favorite password, "RSM", every fourth time. He used this password at 12 a.m. on January 1, 2017. What was the first day in January that he did not use this password?



- 
9. Mandy arranged  $1\text{ ft} \times 1\text{ ft} \times 1\text{ ft}$  boxes in a stack that is  $5\text{ ft} \times 5\text{ ft} \times 5\text{ ft}$ . Andy took all the boxes from the top layer of the stack. Then, Sandy took all the boxes from the rightmost side of the remaining stack. How many boxes are left in the stack?



- 
10. Hogwarts students stand in a row. Harry noted that 22 students are to his left side. Hermione noted that 11 students, including Harry, are to her right side. How many students are between Harry and Hermione if there are 27 students in the row?

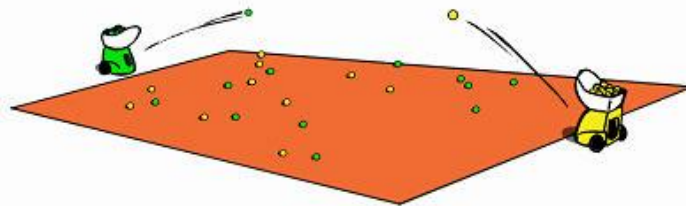


- 
11. How many  $2 \times 4$  LEGO bricks do you need to cover two  $14 \times 16$  LEGO building plates?
-

12. Tom Sawyer painted  $\frac{3}{5}$  of a fence with  $\frac{1}{3}$  of a canister of paint. How many milliliters of this paint did he use to paint the whole fence, if the canister contains 990 milliliters of paint?



13. Two faulty tennis ball machines start to shoot balls from opposite sides of a 25 meter by 10 meter tennis court. The green ball machine shoots green balls that stop on the court 5 meters to 20 meters from the green machine's side. The yellow ball machine shoots yellow balls that stop on the court 2 meters to 16 meters from the yellow machine's side. Find the area of the tennis court that has balls of either color on it.



14. Two brothers, Jim and John, had a straight log in their backyard. Jim wanted the log cut into 24 equal parts. He painted red lines on the log and called to a lumberjack to cut the log by the painted lines. John wanted the log cut too, but into 18 equal parts. He painted yellow lines on the log with some yellow lines painted over red lines. The lumberjack came and cut the log by the painted lines. How many cuts did the lumberjack make?



### Answers

Question No.	Answer
1	70 times
2	4
3	25 chocolate frogs
4	$x=75$
5	27
6	3018
7	26 years old
8	January 4, 2017
9	80 boxes
10	6 students
11	56
12	550 milliliters
13	110 square meters
14	35 cuts



# Grade 5

## IMC 2016

1. A young wizard knows this many spells:  $60 \div 2 \times 10$ . An old wizard knows twice as many. How many spells does the old wizard know?



- 
2. Calculate:

$$\left(5\frac{1}{3} - 4\frac{2}{3}\right) \cdot 3$$

- 
3. A snail can crawl 12 inches in 3 hours. How many inches can it crawl in 5 hours?



- 
4. If the sum of two numbers is 46 and the difference is 10, what is the larger number?

- 
5. Find the value of  $x$ , if:

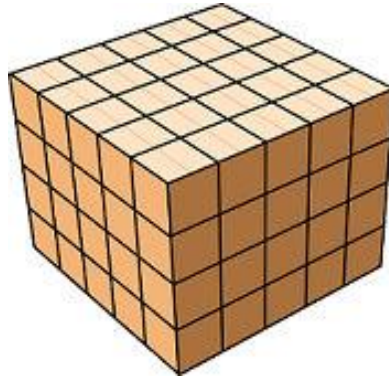
$$3x - 23 = 10$$

- 
6. Sina trained for the RSM Olympiad. On the first day of her training she solved 20 problems. Each day she solved one more problem than the day before. On her last

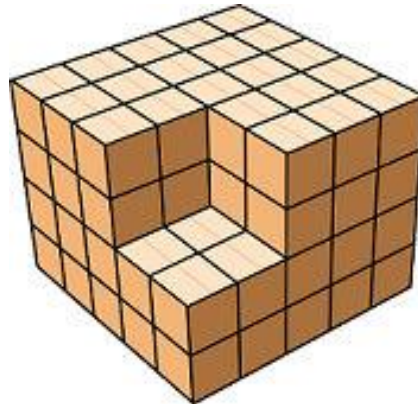
day of training she solved 80 problems. How many days did Sina train for the Olympiad?

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7. We have so much chocolate prepared for the party that we had to put it all in boxes and arrange the boxes in this pile, which is 4 boxes high, 5 boxes wide, and 5 boxes long:



Soon we saw that some boxes of chocolate were missing—someone just loved our chocolate!



How many boxes of chocolate do we have now?

---

8. Find the missing number:

$$2016 \cdot 199 = 2016 \cdot ? + 2016 \cdot 98$$

---

9. Jackie is 8 years older than Mona. If 9 years ago she was three times as old as Mona was, how old is Jackie now?
- 

10. Kate's math team meets every 3<sup>rd</sup> day. For example, they met on Monday, January 4<sup>th</sup>. Next time, they met on Thursday, January 7<sup>th</sup>. After that, they met on Sunday, January 10<sup>th</sup>. When in January did they again meet on Monday?
-

11. How many square tiles with sides of length 2 feet does one need to cover the floor of a room 30 feet long and 20 feet wide?

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12. If Sammy eats  $\frac{6}{7}$  of a pizza in  $\frac{2}{21}$  of an hour, how many pizzas will he eat in one hour?

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13. A Magic Carpet is 12 feet long and 10 feet wide. However, only the purple part of the Magic Carpet has magic power. If the magic part is 2 feet wide, find the area of the magic part of the Magic Carpet.



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14. Once upon a time, on an island in the middle of an ocean, several tribes lived and fought with each other. A time came when all the tribes agreed to everlasting peace. So, they decided to build a giant monument to celebrate this Peace Treaty.

The monument required a certain number of logs, and the tribes had to agree on the number of logs that each tribe was to provide. Had there been two fewer tribes on the island, this number of logs would have been 6. Had there been one more tribe on the island, this number would have been 5.

Unfortunately, the tribes could not agree on what number of logs would be fair for the actual number of tribes. So the tribes announced an eternal war - and were not heard from ever again. How many tribes were on the island?

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## Answers

Question No.	Answer
1	600 spells
2	2
3	20 inches
4	28
5	11
6	61 days
7	92 boxes
8	101
9	21
10	Monday, January 25th
11	150 tiles
12	9 pizzas
13	72 square feet
14	17 tribes

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## IMC 2019 Grade 6

1. What is the smallest number can you get when you subtract a one-digit number from 50 and then double the result?

.....

2. Find  $x$ , if  $\frac{x-3}{15} = \frac{18}{5}$

.....

3. In the film, *Zeke the Zombie Slayer Versus the Zombies from Space*, Zeke slayed 140 zombies. In the sequel, *Zeke the Zombie Slayer Versus the Zombies from Space, Part 2*, he slayed 5% more zombies. How many zombies were slain by Zeke in the sequel?

.....



4. Adam the Ant and Anna the Ant dared each other to grab a moving bicycle wheel. Adam the Ant hung on for 20 seconds, in which time the wheel made 30 turns; then, he fell off. Anna the Ant hung on 12 seconds longer than Adam the Ant. How many times did she spin around on the bicycle wheel?

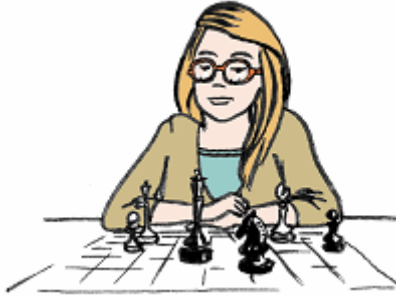


.....

5. Calculate:  $49 - \frac{2}{3} \cdot (-3)^3$

.....

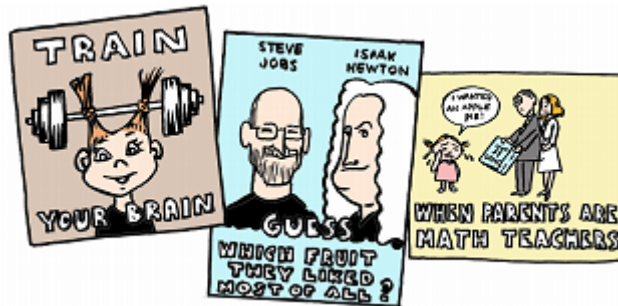
- 
6. Chelsea is a chess champion. She's played 132 games; her ratio of wins to draws to losses is  $6 : 3 : 2$ . How many games has she won?



- .....
7. One chocolate bar can be used to create one chocolate rabbit with some chocolate left over. The leftovers of seven bars can be used to create two chocolate rabbits without any chocolate left over. How many chocolate rabbits can be created from 35 chocolate bars?
- .....



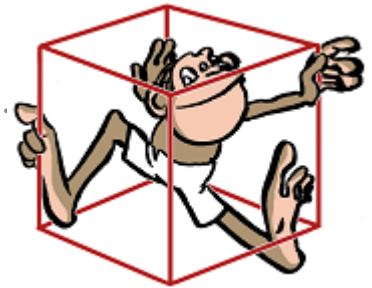
8. Ben, Fran and Stan are posting funny memes online. Ben's funny memes got 40% more likes than Stan's. Fran's got 20% fewer likes than Stan's. By what percentage did Ben get more likes than Fran?



- 
9. Any time Speedy the Sloth is not sleeping, she drinks chamomile tea at a steady rate of  $\frac{2}{7}$  of a cup per hour. Yesterday, she drank 1 cup. If today she drank  $\frac{17}{42}$  of a cup more than yesterday, how long (in minutes) did she stay awake today?



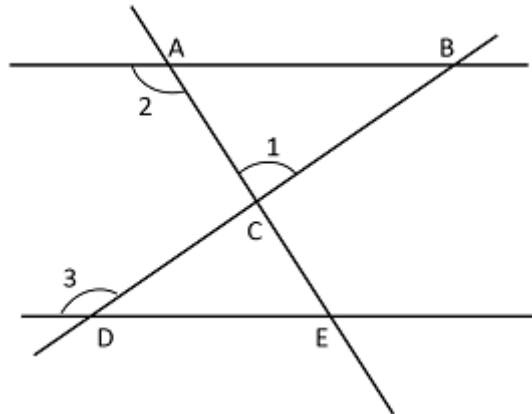
- .....
10. If you double all edges of a cube, by what percent will the volume of this cube increase?
- .....



11. All the unicorns on Rainbow Island are either green or yellow. Every time the clock strikes midnight, some of the unicorns change their color. Yesterday, there were 6 green unicorns for every 5 yellow ones. Today, there are 3 green ones for every 4 yellow ones. What is the smallest possible number of unicorns living on Rainbow Island?



12.  $\overline{AB} \parallel \overline{DE}$ ,  $C$  is the point of intersection of  $\overline{AE}$  and  $\overline{DB}$ .  
 $m\angle 1 = 80^\circ$ ,  $m\angle 2 : m\angle 3 = 2 : 3$ . Find  $m\angle 2$ .



- .....
13. What is the largest three-digit palindrome divisible by 18?  
 (A palindrome is an integer that remains the same when its digits are reversed. For example, 77, 151, 8338, and *etc.*)

- .....
14. Six of King Arthur's knights are sitting around the Round Table eating peanuts. Since each knight suspected the others of not sharing fairly, each one secretly counted his two neighbors' peanuts and summed them up, with the following results (in order): 20, 28, 36, 44, 52, 60. How many peanuts does the knight who counted 52 have?





## Answers

Question No.	Answer
1	The smallest number is 82.
2	$x = 57$
3	Zeke slayed 147 zombies.
4	Anna the Ant spun around the bicycle wheel 48 times.
5	67
6	Chelsea won 72 games.
7	45 chocolate rabbits.
8	Ben got more likes than Fran by 75 percent.
9	Speedy the Sloth stayed awake for 295 minutes.
10	The volume will increase by 700 percent.
11	The smallest possible number of unicorns is 77.
12	$m\angle 2 = 104^\circ$
13	828 is the greatest three-digit palindrome divisible by 18.
14	The knight, who counted 52 peanuts, has 38 peanuts.

# Grade 6

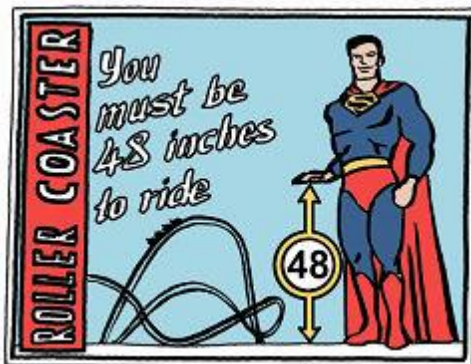
## IMC 2018

1. Find  $x$ , if:

$$\frac{28}{x} = \frac{2}{3}$$

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2. Tom is 40 inches tall. The sign next to the Superman Roller Coaster says: "You must be 48 inches to ride!". By what percent does Tom have to grow to be able to ride the roller coaster?



3. Evaluate:

$$64 + \frac{1}{9} \cdot (-27)$$

---

4. A turtle participates in a 40 meter race. She crawled 30 meters in 48 minutes. If the turtle crawled the entire race at the same speed, how many minutes did it take?



- 
5. Emily is playing a game where she receives 2 points as soon as she solves three puzzles correctly. For every ten correctly solved puzzles, Emily earns 3 additional points. How many points did Emily receive if she solved 30 puzzles in all?



- 
6. The top of a square table is covered with four equal square tiles. If the side length of each tile is decreased by 50%, how many tiles of the new size would be needed to cover the same table?



- 
7. Before hosting their annual Chess Tournament and Spelling Bee, a school received 7 boxes of honorary medals: one medal for every participant. After the Chess Tournament, two boxes were empty and the rest were still closed. After the Spelling Bee, which had twice as many participants, there were 72 medals left. How many people competed in the Chess Tournament?



- 
8. Find  $x$ , if:

$$\frac{0.6 - 0.3x}{18} = -\frac{1}{1.2}$$

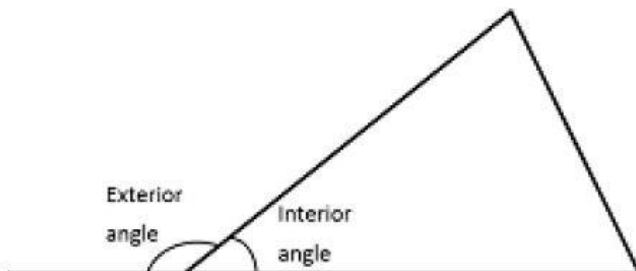
- 
9. Dana sent her mom 60 texts in July, which is 60% fewer texts than her mom sent Dana that month. How many total texts did they exchange in July?



- 
10. A witch made two bowls of potion. The first bowl contains 28.5 ounces of potion, and the second bowl contains 3 ounces of potion. She poured  $\frac{3}{4}$  ounces from the second bowl into the first one. How many times as much potion is in the first bowl as in the second?



- 
11. The measures of the angles of a triangle are in the ratio 2 : 3 : 4. The simplified ratio of the measures of the exterior angles of the triangle is  $a : b : c$ . Find  $a + b + c$ .



12. Mia and Luke made 85 origami together. Mia made 4 pieces of origami every 3 minutes. Luke made 3 pieces of origami every 4 minutes, but Luke spent 5 minutes more than Mia. How many pieces of origami did Mia make?



13. The Charleston family has less than 500 Dalmatians. There are six times as many Dalmatians with black spots on their right ears as Dalmatians without these spots. After giving away 6% of their Dalmatians, how many do the Charltons have left?



14. A blogger who is just starting out made three videos. So far, she has 312 subscribers, who watched one, two, or all three videos. The three videos got 740 total views all together. Assuming each subscriber only viewed a particular video once, how many more people watched all three videos than only one video?



## Answers

Question No.	Answer
1	$x = 42$ .
2	Tom has to grow by 20 percent.
3	61
4	The turtle crawled the entire race in 64 minutes.
5	Emily received 29 points.
6	16 new tiles would be needed to cover the table.
7	144 participants competed in the Chess tournament.
8	$x = 52$
9	They sent 210 messages in total.
10	There is 13 times as much potion in the first bowl.
11	$a + b + c = 18$
12	Mia made 52 pieces of origami.
13	The Charlestons have 329 Dalmatians left.
14	116 more people watched all three videos than only one video.

# Grade 6

## IMC 2017

1. Find  $x$ , if.

$$\frac{x - 8}{x} = \frac{3}{5}$$

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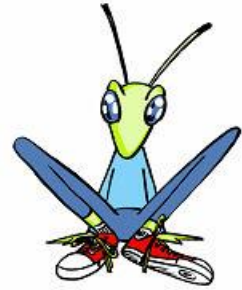
2. The measures of the acute angles of a right triangle are in the ratio 1 : 5. Find the measure of the larger acute angle of the triangle.
- 

3. This year, Slytherin got 5% less House points than the winner Gryffindor. What is the minimum number of House points Slytherin needed more to win if Gryffindor got 420 House points?



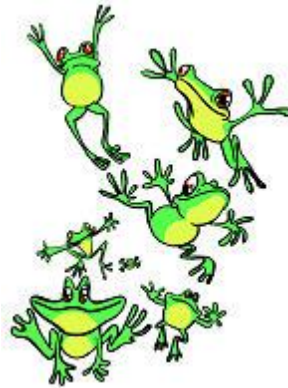
4. Calculate:  $81 - \frac{3}{4} \cdot (-2)^4$
- 

5. A grasshopper makes 6 jumps per 15 seconds. Each jump covers 2 inches. After 40 seconds of straight-forward jumping, the grasshopper stopped. How far (in inches) did the grasshopper jump?



- 
6. How many times larger than the number  $(1 - \frac{8}{15})$  is the number  $(1.2 + \frac{2}{3})$ ?
- 

7. Ron made a mistake casting a spell, and 25 frogs start to appear each second in the classroom. After 10 seconds, Hermione cast another spell, and 35 frogs start to disappear as 25 frogs appear each second. For how many seconds was there at least one frog in the classroom?



- 
8. John beat his previous high score in the Favorite game by 28%. If his new high score is 288 points, what was his previous high score?





- 
9. If you increase the length of the rectangle by 50% and the width of the rectangle by 100%, by what percent will the area of this rectangle increase?



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10. Find  $x$ , if  $\frac{0.1}{0.06-0.03x} = -\frac{1}{6}$

- 
11. A rectangular playing field that is 20 meters long and 15 meters wide was cleaned by 22 boys and 18 girls. The field was divided into equal parts for each child. What area of the field was cleaned by boys?



- 
12. Mary went up the Old Tower taking 3 steps per second. Then she carefully came down from the tower taking 2 steps per second. It took Mary 25 seconds longer to come down than to go up. How many steps does the Old Tower have?



- 
13. This year, the Start-of-Term feast had three desserts: chocolate eclairs, raspberry tarts, and jam doughnuts. On the dessert table, there were two doughnuts for every three eclairs, and six eclairs for every five tarts. How many tarts were on the dessert table if there were a total of 1320 desserts?



- 
14. A man took a trip, traveling by train. He looked out the window during the first  $\frac{1}{3}$  of the trip. He then slept for  $\frac{1}{5}$  of the remaining distance. When he woke up, he read a book for  $\frac{1}{2}$  of the remaining distance. If the train traveled 17.6 km more while he read than while he slept, how many kilometers did the train travel?



### Answers

Question No.	Answer
1	$x=20$
2	75 degrees
3	22
4	69
5	32 inches
6	4 times larger
7	35 seconds
8	225 points
9	200%
10	$x=22$
11	165 square meters
12	150 steps
13	440 tarts
14	132 kilometers

# Grade 6

## IMC 2016

1. Find  $x$ , if:

$$\frac{34}{x} = \frac{2}{5}.$$

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2. The measures of the angles of a triangle are in the ratio 3 : 4 : 5. What is the measure of the largest angle of this triangle?
- 

3. Harry wants to buy a new magic wand that costs 40 coins. How many coins will Harry save if he buys this wand when it is on sale at 10% off?
- 

4. Evaluate:

$$36 - \frac{2}{3} \cdot (-3)^2$$

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5. Jeremy makes \$300 in 35 days. If he is paid the same amount every day, how much money will he make in 42 days?
- 

6. Calculate:

$$\left(0.7 + \frac{2}{7}\right) \cdot 23\frac{1}{3}$$

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7. A certain number of special spells must be cast to protect the secret hiding place of the Order of the Phoenix. Each member of the Order is capable of casting the same number of these spells per hour. If two wizards were to join the Order, casting the protection spells can be completed in three hours instead of four hours. How many wizards are in the Order?
- 

8. While on a journey to find giants, Hagrid lost 64% of his weight. If he now weighs 2016 lb, what did he weigh before the journey?
- 

9. If you double all the sides of a square, by what percent will the area of this square increase?
- 

10. Find the value of  $x$ , if:

$$\frac{3}{3 - 3.5x} = -\frac{2}{5}$$

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11. Together, Hermione and Luna bought 2016 Chocolate Frogs for Harry. If Hermione paid 98 coins and Luna paid 28 coins, for how many Chocolate Frogs did Hermione pay?



12. Andrew is about to leave for school. If he walks at a speed of 50 meters per minute, he will arrive 3 minutes after the bell rings. If he runs at a speed of 80 meters per minute, he will arrive 3 minutes before the bell rings. In how many minutes will the bell ring?
- 

13. A rope that is 245 cm long is cut into three pieces. The ratio of the lengths of the first piece to the second piece is 2 : 3, and the ratio of the lengths of the second piece to the third piece is 4 : 5. What is the length of the longest of the three pieces?



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14. Rory's number is 0.3 larger than Lori's number, and the sum of their numbers is 13. What is ten times Lori's number multiplied by 2016?
- 

### Answers

Question No.	Answer
1	85
2	75 degrees
3	4 coins
4	30
5	\$360
6	23
7	6 wizards
8	5600 lbs
9	300%
10	$x=3$
11	1568 chocolate frogs
12	13 minutes
13	105 cm
14	336

