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Pretest

Multiply whole numbers by fractions

Solve numbers 1 to 5.

1. Which expression is the same as $4 \times \frac{2}{3}$?

- (A) $\frac{4}{1} + \frac{4}{1}$
 (B) $\frac{1}{4} + \frac{1}{4} + \frac{1}{4}$
 (C) $\frac{4}{2} + \frac{4}{2} + \frac{4}{2}$
 (D) $\frac{2}{3} + \frac{2}{3} + \frac{2}{3} + \frac{2}{3}$

2. Which equation could **not** be used to find the total of the shaded areas?

- (A) $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} = \blacksquare$
 (B) $3 \times \frac{1}{4} = \blacksquare$
 (C) $\frac{1}{3} + \frac{1}{3} + \frac{1}{3} + \frac{1}{3} = \blacksquare$
 (D) $\frac{1}{4} \times 3 = \blacksquare$

3. What is the product of 5 and $\frac{3}{4}$?

- (A) $\frac{3}{20}$
 (B) $3\frac{3}{4}$
 (C) $5\frac{3}{4}$
 (D) $15\frac{3}{4}$

4. Jake needs $\frac{2}{3}$ of a cup of blueberries to make one blueberry muffin. If he makes five blueberry muffins, how many cups of blueberries does he need in total?

- (A) $\frac{2}{15}$
 (B) $\frac{2}{3}$
 (C) $2\frac{1}{3}$
 (D) $3\frac{1}{3}$

5. Solve. $7 \times \frac{3}{5} = \blacksquare$

- (A) $4\frac{1}{5}$
 (B) 2
 (C) $\frac{5}{21}$
 (D) $\frac{3}{35}$

Solve numbers 1 to 16.

1. Breanna is planting a garden. Each row needs to be $\frac{1}{2}$ a metre wide. She will plant 6 rows. How many metres wide will the 6 rows be?

Ⓐ $\frac{1}{12}$
Ⓑ $\frac{1}{3}$
Ⓒ 3
Ⓓ 12

2. Find the product. $\frac{3}{8} \times 5\frac{1}{4} = \blacksquare$

Ⓐ $\frac{3}{4}$
Ⓑ $1\frac{31}{32}$
Ⓒ 2
Ⓓ $5\frac{5}{8}$

3. Which expression is the same as $9 \div \frac{4}{5}$?

Ⓐ $\frac{1}{9} \times \frac{4}{5}$
Ⓑ $\frac{1}{9} \times \frac{5}{4}$
Ⓒ $\frac{9}{1} \times \frac{4}{5}$
Ⓓ $\frac{9}{1} \times \frac{5}{4}$

4. Which expression is the same as $\frac{9}{12} \div \frac{5}{6}$?

Ⓐ $\frac{9}{12} \times \frac{5}{6}$
Ⓑ $\frac{9}{12} \div \frac{6}{5}$
Ⓒ $\frac{9}{12} \times \frac{6}{5}$
Ⓓ $\frac{12}{9} \times \frac{5}{6}$

5. It takes Mr Kwan 4.75 minutes to mark each test. What equation can he use to find the number of minutes it will take him to mark 100 tests?

- Ⓐ $4.75 \times 10 = \square$
- Ⓑ $4.75 \div 10 = \square$
- Ⓒ $4.75 \times 100 = \square$
- Ⓓ $4.75 \div 100 = \square$

6. Lyn is replacing the screens on her windows. A new screen costs \$11.89. She needs 8 new screens. How much will it cost Lyn to replace her screens?

- Ⓐ \$95.12
- Ⓑ \$96.00
- Ⓒ \$120.00
- Ⓓ \$951.20

7. What number goes in the box to make the equation true?

$$10.68 \div 6 = \square$$

- Ⓐ 17.8
- Ⓑ 2.78
- Ⓒ 2
- Ⓓ 1.78

8. Which is the best pair of compatible numbers for estimating the quotient of $27.2 \div 2.9$?

- Ⓐ 27 and 3
- Ⓑ 28 and 4
- Ⓒ 29 and 2
- Ⓓ 30 and 3

9. A fruit basket contains 4 bananas and 5 apples. What is the ratio of bananas to all fruit?

- (A) 4:9
- (B) 4:5
- (C) 9:4
- (D) 9:5

10. Which of the following is greater than 100%?

- (A) 0.198
- (B) $\frac{9}{10}$
- (C) 1.09
- (D) $\frac{9}{9}$

11. Adrienne set up the following proportion to find the time it takes her to read 1 page.

$$\frac{56 \text{ pages}}{28 \text{ min}} = \frac{1 \text{ page}}{x \text{ min}}$$

How much time does it take for her to read 1 page?

- (A) 0.5 minute
- (B) 2 minutes
- (C) 5 minutes
- (D) 28 minutes

12. Gus is making picture frames. The table shows the relationship between the number of frames (f) and the amount of wood (w) in metres.

Frames (f)	Wood (w)
3	15
4	20
6	?
9	45

Gus needs to make 6 frames. How much wood does he need?

- (A) 35 m
- (B) 30 m
- (C) 26 m
- (D) 25 m

- 13.** Which operation must be used to solve for z in the following equation?

$$7.2z = 50.4$$

- Ⓐ addition
- Ⓑ subtraction
- Ⓒ multiplication
- Ⓓ division

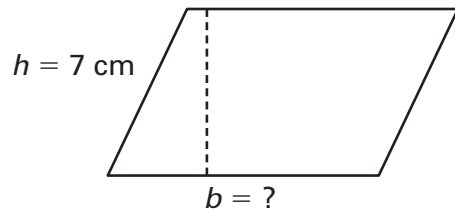
- 14.** Valerie needs to solve the equation below.

$$15y = 75$$

How should she find the solution?

- Ⓐ Add 15 to both sides.
- Ⓑ Divide both sides by 15.
- Ⓒ Multiply both sides by 15.
- Ⓓ Subtract 15 from both sides.

- 15.** If the area of the parallelogram is 59.5 cm^2 , what is the base?



- Ⓐ 8.5 cm
- Ⓑ 8.7 cm
- Ⓒ 52.5 cm
- Ⓓ 66.5 cm

- 16.** A match box has a width of 4 cm, a height of 1 cm and a volume of 16 cm^3 .



What is the length of the box?

- Ⓐ 4 cm
- Ⓑ 12 cm
- Ⓒ 21 cm
- Ⓓ 64 cm

Post test

Multiply whole numbers by fractions

Solve numbers 1 to 5.

1. Carol needs $\frac{3}{4}$ of a cup of sugar for each batch of brownies. If she makes 3 batches of brownies, how many cups of sugar will she use in total?

- (A) $\frac{1}{4}$
 (B) $\frac{3}{4}$
 (C) $1\frac{1}{2}$
 (D) $2\frac{1}{4}$

2. Solve. $5 \times \frac{3}{8} = \blacksquare$

- (A) $1\frac{7}{8}$
 (B) 1
 (C) $\frac{8}{15}$
 (D) $\frac{3}{40}$

3. Which expression is the same as $2 \times \frac{3}{5}$?

- (A) $\frac{2}{1} + \frac{2}{1} + \frac{2}{1}$
 (B) $\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2}$
 (C) $\frac{2}{3} + \frac{2}{3} + \frac{2}{3} + \frac{2}{3} + \frac{2}{3}$
 (D) $\frac{3}{5} + \frac{3}{5}$

4. Which equation **cannot** be used to find the total of the shaded areas?



- (A) $4 \times \frac{1}{2} = \blacksquare$
 (B) $\frac{1}{2} \times 4 = \blacksquare$
 (C) $\frac{1}{4} \times 2 = \blacksquare$
 (D) $\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} = \blacksquare$

5. What is the product of 6 and $\frac{2}{5}$?

- (A) $\frac{2}{11}$
 (B) $1\frac{3}{5}$
 (C) $2\frac{2}{5}$
 (D) $6\frac{2}{5}$