

Grade 6 end-of-year math test

NAME	DATE	SCORE / 10
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Answer each question. Show your work.

1 Gas costs \$2.80 per gallon. How much do 6 gallons of gas cost, in dollars?

3 Write the ratio 18:12 with both numbers divided by 6.

5 Leo and Ivy share \$35 in the ratio 2:5. How much money does Ivy get, in dollars?

7 An animal shelter has 2 cats and 16 dogs. Write the ratio of cats to dogs in simplest form.

9 A printer prints 34 pages per minute. Which sentence tells what this rate means?

☐ The printer can print 34 pages in all.

☐ In 1 minute, the printer prints 34 pages.

☐ The printer takes 34 minutes to print 1 page.

☐ In 1 hour, the printer prints 34 pages.

2 Write an expression for "7 times the difference of a number n and 10".

4 In a class of 20 children, 10 have a pet. What percent of the children in the class have a pet?

6 Write $\frac{7}{8}$, 0.613, $\frac{1}{5}$, 0.4, $\frac{1}{6}$ in order from least to greatest.

8 Which property shows that $4x + 7 = 7 + 4x$?

☐ Associative property of multiplication

☐ Associative property of addition

☐ Commutative property of addition

☐ Commutative property of multiplication

10 Ben has 8 cups of rice. Each bowl gets $\frac{1}{4}$ cup of rice. Which calculation finds the number of bowls Ben can fill?

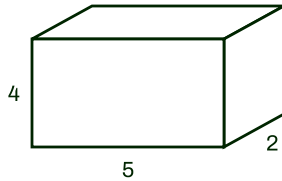
☐ $8 \div \frac{1}{4}$ ☐ $8 \times \frac{1}{4}$ ☐ $\frac{1}{4} \div 8$ ☐ $8 - \frac{1}{4}$

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NAME	DATE	SCORE / 4
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Answer each question. Show your work.

- 11** Lengths on the prism below are in meters. What is the surface area, in square meters, of the prism?



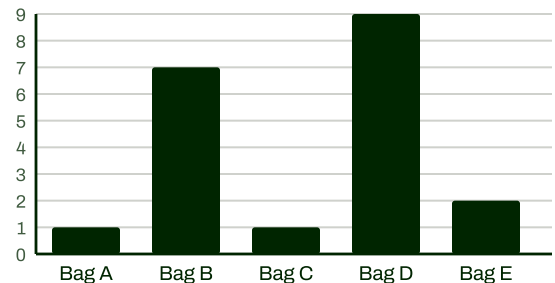
- 12** The tally shows how many goals each team scored. How many observations are in the data set?

0 goals	
1 goal	
2 goals	
3 goals	
4 goals	
5 goals	

- 13** Which list puts $\frac{7}{8}$, -1.4 , $-1\frac{1}{2}$, $-\frac{1}{2}$ in order from least to greatest?

- ☐ $-\frac{1}{2}$, -1.4 , $-1\frac{1}{2}$, $\frac{7}{8}$
☐ $-\frac{1}{2}$, $\frac{7}{8}$, -1.4 , $-1\frac{1}{2}$
☐ $-1\frac{1}{2}$, -1.4 , $-\frac{1}{2}$, $\frac{7}{8}$
☐ $\frac{7}{8}$, $-\frac{1}{2}$, -1.4 , $-1\frac{1}{2}$

- 14** The graph shows how many apples are in each bag. 5 more apples are put in Bag B. How does the mean number of apples per bag change?



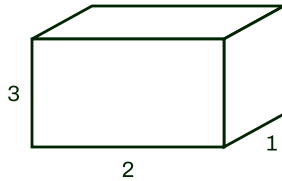
- ☐ It goes down by 1 ☐ It stays the same
☐ It goes up by 1 ☐ It goes up by 5

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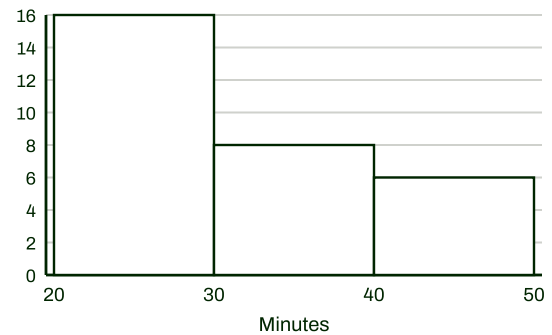
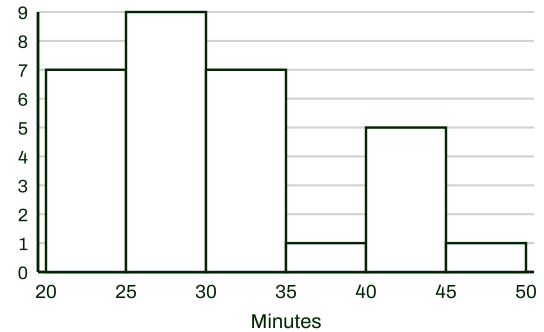
NAME	DATE	SCORE / 2
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Answer each question. Show your work.

- 15** The box below is 2 units long, 1 unit wide and 3 units tall. Each square on the grid is 1 unit long. Draw a net for the box on the grid.



- 16** Both histograms show the same data: how many minutes each runner took to finish a fun run. Which histogram hides a real feature of the data?



- ☐ The bottom one: it shows fewer runners
- ☐ The bottom one: its wider bars hide the gap between two groups
- ☐ The top one: its narrower bars invent a gap
- ☐ Neither: the same data always gives the same shape

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- 1

16.80
- 2

$7(n - 10)$
- 3

3:2
- 4

50
- 5

25
- 6

$\frac{1}{6}, \frac{1}{5}, 0.4, 0.613, \frac{7}{8}$
- 7

1:8
- 8

Commutative property of addition
- 9

In 1 minute, the printer prints 34 pages.
- 10

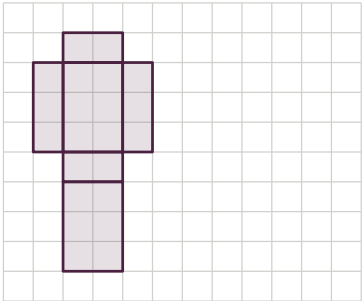
$8 \div \frac{1}{4}$
- 11

76
- 12

17
- 13

$-1\frac{1}{2}, -1.4, -\frac{1}{2}, \frac{7}{8}$
- 14

It goes up by 1
- 15



Six rectangles joined edge to edge: two 2 by 1, two 2 by 3 and two 1 by 3, arranged so they fold into the box. Any layout that folds closed with no gaps or overlaps counts; matching edges must be the same length.

- 16

The bottom one: its wider bars hide the gap between two groups