Grade 7 end-of-year math test

NAME	DATE	SCORE / 12

Answer each question. Show your work.

1 $60 \div (-12) = ?$

2 Solve $-8x > 56$.

3 The sequence 35, 28, 21, 14 continues in the same way. What is the common difference?

4 Which number is not equal to $-\frac{1}{7}$?

- ◯ $-\left(\frac{1}{7}\right)$
- ◯ $(-1)/7$
- ◯ $(-1)/(-7)$
- ◯ $1/(-7)$

5 $-4 \times \frac{3}{7} = ?$ Give the answer in lowest terms.

6 On a floor plan, 1 inch stands for 2 feet. A room is 7.5 inches long on the plan. How long is the real room, in feet?

7 The list shows how many minutes each student read last night: 40, 29, 32, 39. What is the mean absolute deviation of the data?

8 Two angles measure 141° and 19°. Are the two angles complementary, supplementary or neither?

- ◯ Complementary
- ◯ Supplementary
- ◯ Neither

9 Each pencil costs $0.20. Write an equation for the cost y, in dollars, of x pencils.

10 Which three lengths could be the side lengths of a triangle?

- ◯ 7 feet, 10 feet and 2 feet
- ◯ 6 feet, 9 feet and 2 feet
- ◯ 9 feet, 12 feet and 13 feet
- ◯ 5 feet, 9 feet and 4 feet

11 To estimate what share of students at a school walk to school, Ana asks students at the bike racks. Who is likely to be over-represented in the sample?

- ◯ Students who ride a bike to school
- ◯ No one, since every student had the same chance of being asked
- ◯ Students who walk to school

12 A farmer wants to know the mean weight of the 2,000 apples in a crop. The farmer weighs 40 apples picked at random. What is being estimated?

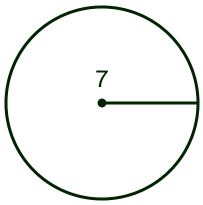
- ◯ All apples grown anywhere
- ◯ The 40 apples that were weighed
- ◯ All 2,000 apples in the crop
- ◯ The mean weight of an apple in the crop

Grade 7 end-of-year math test

NAME	DATE	SCORE / 4

Answer each question. Show your work.

13 The circle below is measured in centimeters. Use $\frac{22}{7}$ for π. What is the circumference, in centimeters, of the circle?

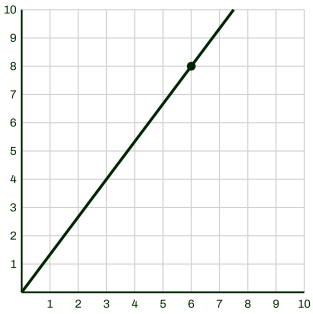


14 A field is a rectangle 60 meters long and 50 meters wide, with a semicircle on each 50 meter end. Use 3.14 for π. What is the area, in square meters, of the whole field?

15 Bus A and Bus B each made the same trip on 6 days. Bus A took 13, 30, 22, 22, 31 and 14 minutes. Bus B took 24, 21, 20, 24, 20 and 23 minutes. Both have a mean of 22 minutes. Which statement is best supported by the data?

- ○ Bus A's next trip will take longer, since Bus A has the longest trip
- ○ Bus A's next trip is more likely to take close to 22 minutes
- ○ Both next trips will take exactly 22 minutes
- ○ Bus B's next trip is more likely to take close to 22 minutes

16 The graph below shows y proportional to x. What is the constant of proportionality?



Grade 7 end-of-year math test

1 −5	2 $x < -7$	3 −7
4 (−1)/(−7)	5 $-\frac{12}{7}$	6 15
7 4.5	8 Neither	9 $y = 0.2x$
10 9 feet, 12 feet and 13 feet	11 Students who ride a bike to school	12 The mean weight of an apple in the crop
13 44	14 4962.5	15 Bus B's next trip is more likely to take close to 22 minutes
16 $\frac{4}{3}$		