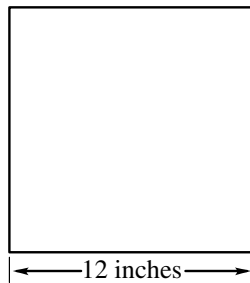


Session 1, Open-Response Question

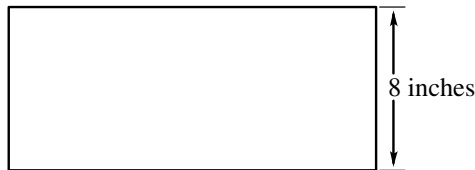


- 13 Todd, Chi, and Janet are making posters for art class. They decide that each poster will have the same area, but different dimensions.

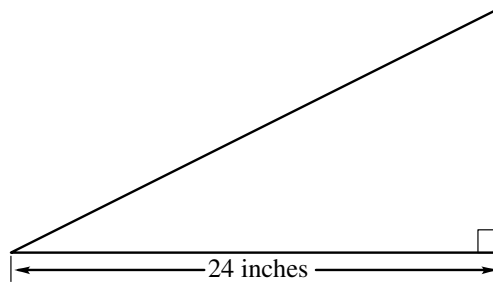
Todd makes his poster on a square with a side that measures 12 inches.



Chi wants to make his poster on a rectangle with a width of 8 inches.



Janet will use a right triangle with a base of 24 inches.



- What is the area of Todd's square? Show or explain your work.
- What would the length of Chi's rectangle need to be in order for the rectangle to have the same area as Todd's square? Show or explain your work.
- What would the height of Janet's triangle need to be in order for the triangle to have the same area as Todd's square? Show or explain your work.

Reporting Category for Item 13: *Measurement*

Mathematics, Grade 6

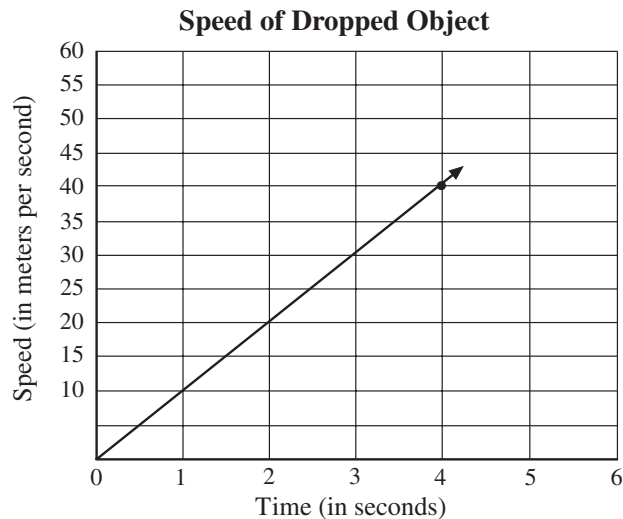
Session 1, Multiple-Choice Questions



- 14 Maria charges \$5.00 to mow a lawn, plus \$6.00 per hour. Maria uses the equation $C = 5 + 6h$ to determine C , the amount of money she charges for mowing lawns. If h represents the number of hours it takes to mow a lawn, how much money will Maria charge if she mows a lawn for 3 hours?
- A. \$11.00
 - B. \$14.00
 - C. \$21.00
 - D. \$23.00

Reporting Category for Item 14: *Patterns, Relations, and Algebra*

- 15 The graph below shows the speed of a dropped object over time.



Based on the graph, what will be the approximate speed of the dropped object after 5 seconds?

- A. 5 meters per second
- B. 25 meters per second
- C. 50 meters per second
- D. 75 meters per second

Reporting Category for Item 15: *Patterns, Relations, and Algebra*

Mathematics, Grade 6

- 16 The table shows the temperature on four winter mornings in the Berkshire Mountains.

**Winter Temperatures
in the Berkshire Mountains**

Date	Temperature at 6:00 A.M.
Thursday	-9°C
Friday	-10°C
Saturday	-18°C
Sunday	-12°C

Which day had the warmest morning?

- A. Thursday
- B. Friday
- C. Saturday
- D. Sunday

Reporting Category for Item 16: Number Sense and Operations