Geometry Unit 0 Study Guide
Answer Section

SHORT ANSWER

1 –5

2 –6

3 3

4 $(x+1)(x+14)$

5 $(x+2)(x-11)$

6 $\{-14, 6\}$

7 $\{9, 17\}$

8 9, -1

9 $2 \pm \sqrt{3}$

10 A) Table should have these coordinates: Hour 0, 38; Hour 1, 41; Hour 2, 44; Hour 3, 47; Hour 6, 56
B) Graphs may vary, but should show a slope of 3 and a y intercept of 38 degrees and MUST be a straight line.
C) $y = 3x + 38$
D) Answers may vary, one example is $y - 41 = 3(x - 1)$
E) At zero hours, the temperature is 38 degrees. When the situation begins, the starting temperature measurement is 38 degrees.
F) Y intercept may vary, but the answer should always look like: $y = 3x + b$, where b can be any y intercept, but should be a number.
G) Y intercept may vary, but the answer should always look like: $y = -\frac{1}{3}x + b$, where b can be any y intercept, but should be a number.

11 905.6 g

12 $\frac{-18\sqrt{3} - 6\sqrt{2}}{25}$

13 $5\sqrt{3}$

14 $\frac{\sqrt{14x}}{8}$

15 47.92 m

16 195 cm

17 $12\sqrt{2}$ ft

The side of the square is given by the formula $s = \sqrt{A}$, where s is the length of the side and A is the area. Use the Pythagorean theorem ($a^2 + b^2 = c^2$) to find the length of the diagonal.

18 79.75