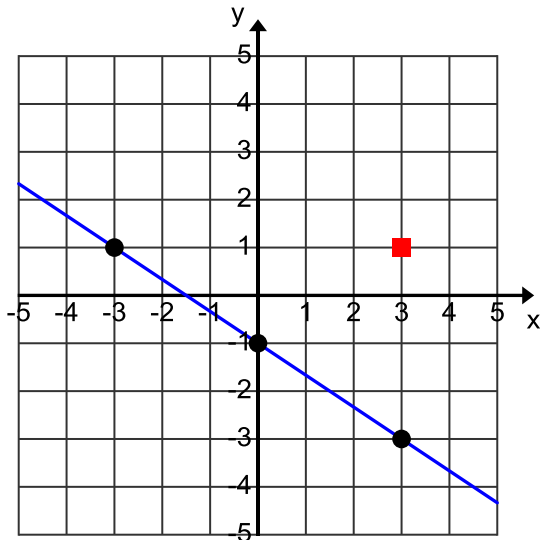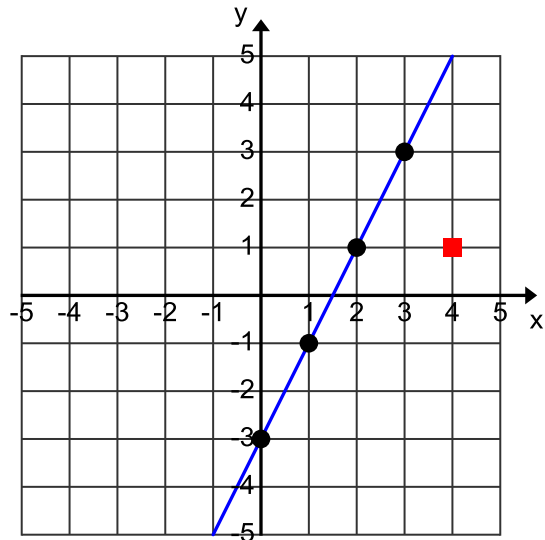# Slope and Distance

Name _____

Graph 1

Graph 2

_____ 1. In graph 1 above, give a point with integral coordinates that goes through (3, 1) making the newly formed line parallel to the drawn line.

_____ 2. In graph 1 above, give a point with integral coordinates that goes through (3, 1) making the newly formed line perpendicular to the drawn line.

_____ 3. In graph 2 above, give a point with integral coordinates that goes through (4, 1) making the newly formed line parallel to the drawn line.

_____ 4. In graph 2 above, give a point with integral coordinates that goes through (4, 1) making the newly formed line perpendicular to the drawn line.

_____ 5. What is the slope between the points (4, 6) and (2, 20)?

_____ 6. What is the slope between the points (-6, -1) and (-2, 19)?

_____ 7. A = (6, 12), B = (4, 8), and C = (5, 7). What value of D would make $\overline{AB} \perp \overline{CD}$?
A. (9, 5)   B. (1, 9)   C. (6, 9)   D. (7, 10)   E. (6, 6)

_____ 8. A = (6, 12), B = (4, 8), and C = (5, 7). What value of D would make $\overline{AB} \parallel \overline{CD}$?
A. (9, 5)   B. (1, 9)   C. (6, 9)   D. (7, 12)   E. (6, 6)

Graph 3
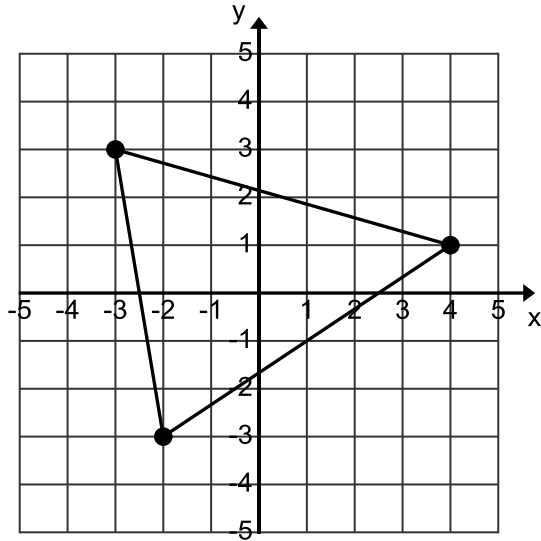
Graph 4
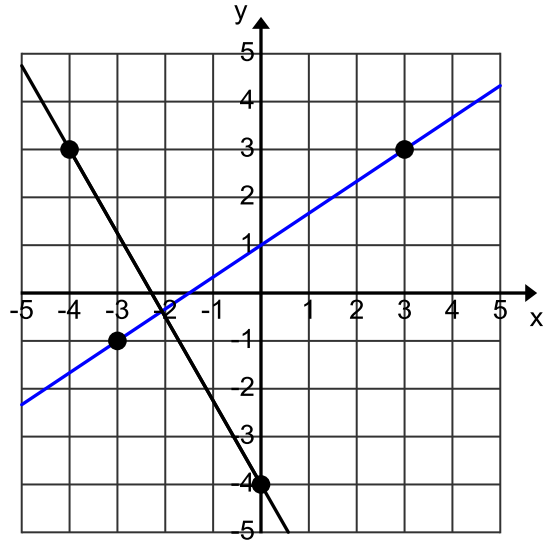
9. In graph 3, label the points accordingly: A = (-3, 3)   B = (4, 1)   C = (-2, -3)

_____ 10.   In graph 3, what is the slope of $\overline{AB}$?

_____ 11.   In graph 3, what is the slope of $\overline{CB}$?

_____ 12.   In graph 3, what is the slope of $\overline{AC}$?

_____ 13.   In graph 3, what is the perimeter of the triangle rounded to the nearest tenth?

14.   In graph 4, determine if the lines are perpendicular and explain below why or why not?

_____

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