PASSEXAM 問題集

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EXAM

1年で無料進級することに提供する

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Exam : **ACT Math**

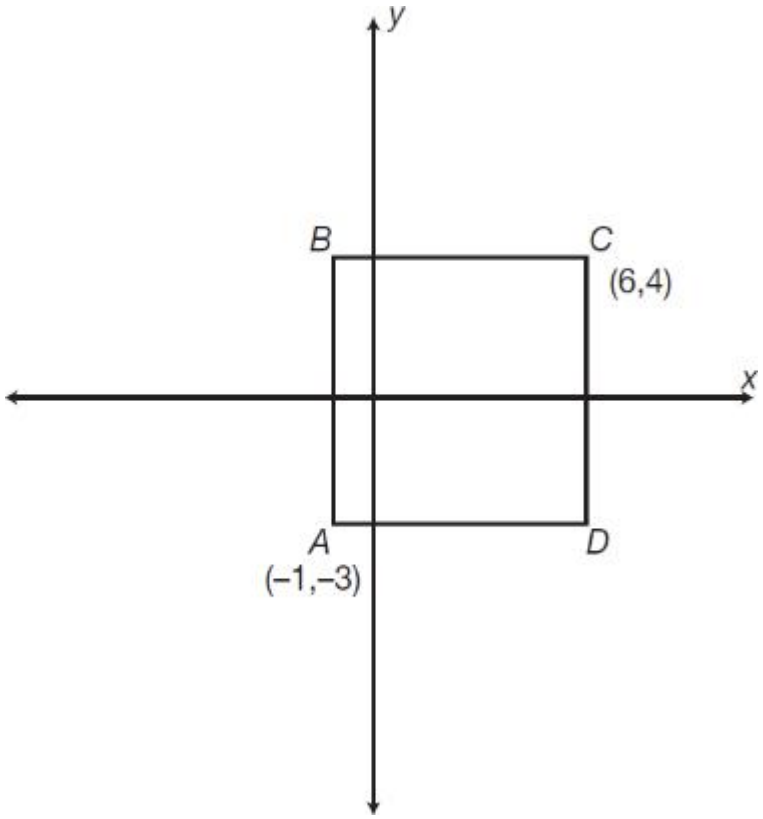
Title : ACT American College Testing: Math Section

Version : DEMO

1.If the expression $\frac{3}{2+x} = \frac{x-5}{2x}$, then one possible value of x could be:

A. – 1
B. – 2
C. – 5
D. 1
E. 2
Answer: A
Explanation:
Cross multiply and solve for x:
3 × 2x = (^{2} + x) × (x – 5)
6x = x^2 – 3x – 10
x^2 – 9x – 10 = 0
(x – 10) × (x + 1)
x = 10, x = –1

2.In the graph above, ABCD is a square.



What are the coordinates of point B?
A. (–1, –4)
B. (–1, 4)
C. (–1, 6)
D. (–3, 1)
E. (–3, 4)
Answer: B

Explanation:
Point B is the same distance from the y-axis as point A, so the x-coordinate of point B is the same as the x-coordinate of point A (–1). Point B is the same distance from the x-axis as point C, so the y-coordinate of point B is the same as the y-coordinate of point C (4). The coordinates of point B are (–1, 4).

3.Line y = 2/3x – 5 is perpendicular to line:
A. y = 2/3x + 5
B. y = 5 – 2/3x
C. y = –2/3x – 5
D. y = 2/3x – 5
E. y = –2/3x + 5
Answer: E
Explanation:
Perpendicular lines have slopes that are negative reciprocals of each other. The slope of the line given is 2/3. The negative reciprocal of 2/3 is 3/2. Every line with a slope of $–3/^{2}$ is perpendicular to the given line; y = –3/2x + 5 is perpendicular to y = 2/3x – 5.

4.If 30% of r is equal to 75% of s, what is 50% of s if r = 30?
A. 4.5
B. 6
C. 9
D. 12
E. 15
Answer: B
Explanation:
If r = 30, 30% of r = 0.30 × 30 = 9. 9 is equal to 75% of s. If 0.75s = 9, then s = 12. 50% of s = 0.50 × 12 = 6.

5.A dormitory now houses 30 men and allows 42 square feet of space per man.
If five more men are put into this dormitory, how much less space will each man have?
A. 5 square feet
B. 6 square feet
C. 7 square feet
D. 8 square feet
E. 9 square feet
Answer: B
Explanation:
30 men × 42 square feet = 1260 square feet of space; 1260 square feet ÷ 35 men = 36 square feet; 42 – 36 = 6, so each man will have 6 less square feet of space.