

SAT Prep
Day 6 Create Equations In 2 Variables

Name _____

Period _____

1. The sum of 4 consecutive integers is equal to 3 times the largest. What is the largest of the integers?
a) 2 b) 4 c) 6 d) 8 e) 10

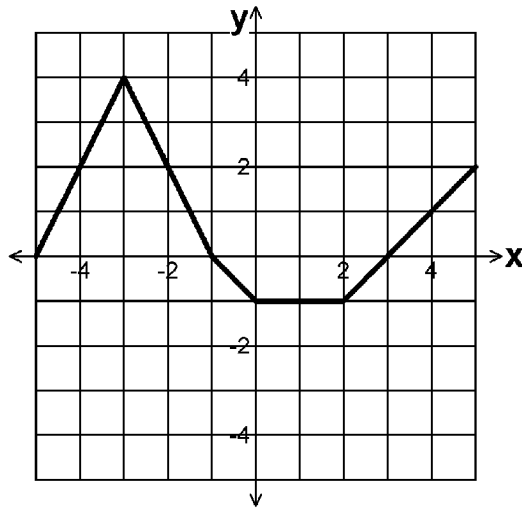
2. Drew works 4 hours every Monday, Tuesday, Wednesday and Saturday, and has Thursdays and Sundays off. If she works a total of 24 hours per week, how many hours does she work every Friday?
a) 0 b) 2 c) 4 d) 6 e) 8

3. If $x^2 - 1 = 8 \times 3 \times 7$ and $x > 0$, then $x =$
a) 12 b) 13 c) 14 d) 15 e) 16

4. The total cost c , in dollars, of framing a picture is given by the function
$$c(x) = \frac{500x - 200}{x} + k$$
where k is a constant. If 25 pictures were framed yesterday at a cost of \$752, what is the value of k ?
a) 60 b) 90 c) 100 d) 120 e) 260

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5. The figure above shows the graph of function f . If the function g is defined by $g(x) = f(1 - 2x) + 1$, what is the value of $g(2)$?

a) -4 b) -3 c) 1 d) 3 e) 5

6. Anita Juarez and her brother decide to mow lawns to earn money over the summer. The profit they realize from the lawnmowing is modeled by the function $P(x) = 5x - 60$ where x represents the number of lawns mowed and $P(x)$ represents the profit in dollars. If Anita and her brother mow a total of 65 lawns, how much money will they have earned?

a) \$265 b) \$270 c) \$275 d) \$280 e) \$295

1.
Answer: c
CodePath: EAS.SAT.B.G.8
2.
Answer: e
CodePath: EAS.SAT.B.G.74
3.
Answer: b
CodePath: EAS.SAT.B.C.5
4.
Answer: e
CodePath: EAS.SAT.G.D.15
5.
Answer: e
CodePath: EAS.SAT.G.G.16
6.
Answer: a
CodePath: EAS.SAT.G.D.14