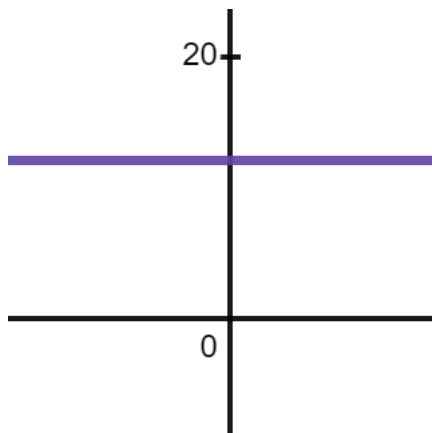


# Precalculus Summer Math Packet Answer Key

Summer 2021

Seriously hope that you did the reflection assignment! Mrs. Contreras is growing a garden this summer and Mr. Kirk is baking bread.

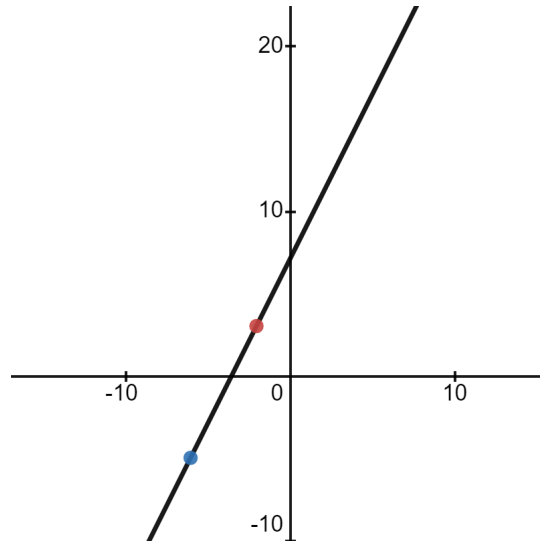
1.
  - a)  $1590\text{ mm}$
  - b)  $0.0032\text{ km}$
  - c)  $1.5\text{ ft}$
  - d)  $21,120\text{ ft}$
  - e)  $10.8\text{ ft}$
2.
  - a)  $P = 222; A = 2,272$
  - b)  $P = 28.770; A = 26$
3.
  - a)  $A = 84.949\text{ cm}^2, C = 32.673\text{ cm}$
  - b)  $r = 3\text{ m}, A = 28.274\text{ m}^2$
  - c)  $C = 23.510\text{ cm}, d = 7.483\text{ cm}$
4.
  - a)  $x = 1.697$
  - b)  $x = 6.75$
  - c)  $x = 3$
  - d)  $x = -4, 3$



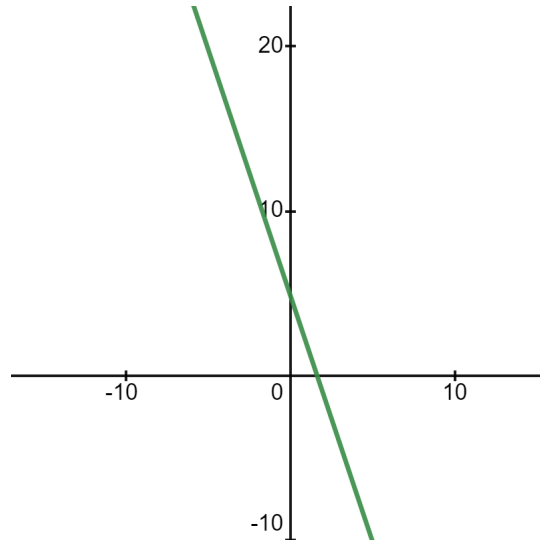
5.
  - a)  $y = 12$

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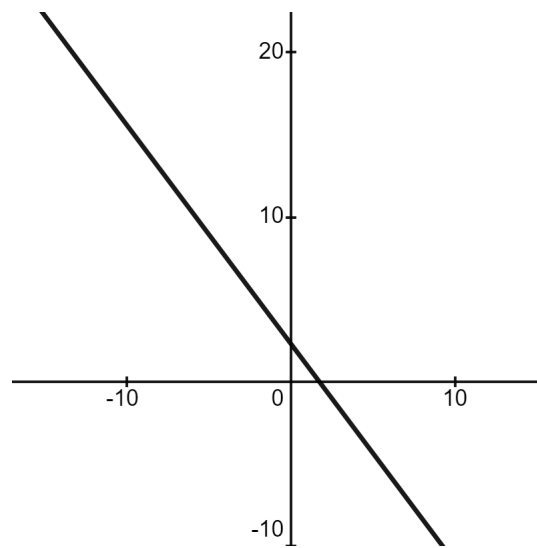
b)  $y - 3 = 2(x + 2)$



c)  $y = -3x + 5$



d)  $y - 1 = -\frac{4}{3}(x - 1)$



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6. a)  $x^2 - x - 72$   
b)  $x^2 - 16x + 64$   
c)  $x^3 + 6x^2 + 12x + 8$   
d)  $2x^2 + 9x - 5$   
e)  $x^2 + 2xy - 4x + y^2 - 4y + 4$   
f)  $-3x^4 + x^3 + 5x^2 - 3x + 12$
7. a)  $x = -8, x = 9$   
b)  $x = 8$   
c)  $x = 4$   
d)  $x = \pm 2, x = \pm 3$
8. a)  $x = -5, x = \frac{1}{2}$
9. a)  $(2, -1)$   
b)  $(-2, 4)$
10. a)  $x = 12$   
b)  $x = 4i$
11. a)  $31^\circ$  and  $149^\circ$  OR  $43^\circ$  and  $137^\circ$   
b)  $90^\circ$
12. a) 33.510  
b) 1.180  
c) 6  
d) 10.392  
e) 10.738
13. a)  $b = 66.068, m\angle C = 34^\circ$   
b)  $b = 63.918, c = 55.088, m\angle A = 101^\circ$   
c)  $m\angle A = 59.015^\circ, m\angle B = 88.195^\circ, m\angle C = 29.181^\circ$

Note: this might have errors. Let us know what you find :)