

6-2 Intercepts with Domain and Range Extras

Name: _____

Time Start: _____ Finish: _____ Total Time = _____

Look at the graphs below and list the x and y-intercepts.

Write them as an ordered pair like $(0, 3)$ and $(7, 0)$. Piece of cake!

1. x-intercept = _____

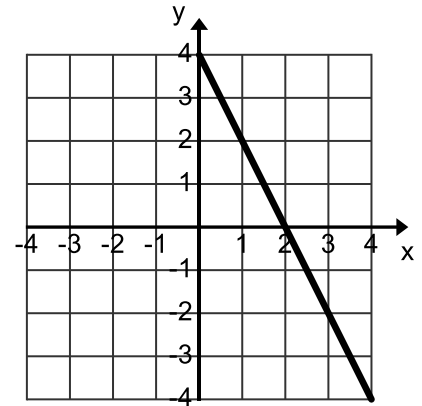
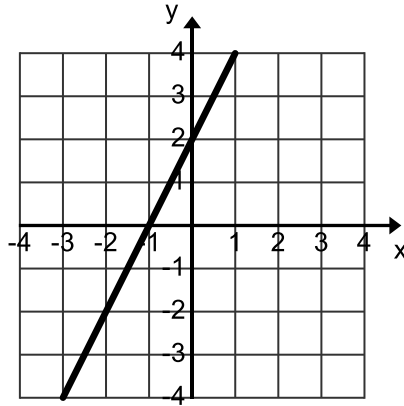
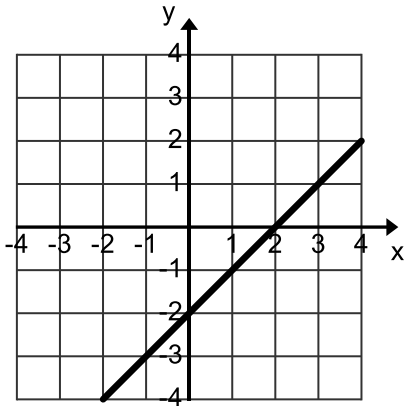
2. x-intercept = _____

3. x-intercept = _____

y-intercept = _____

y-intercept = _____

y-intercept = _____



4. x-intercept = _____

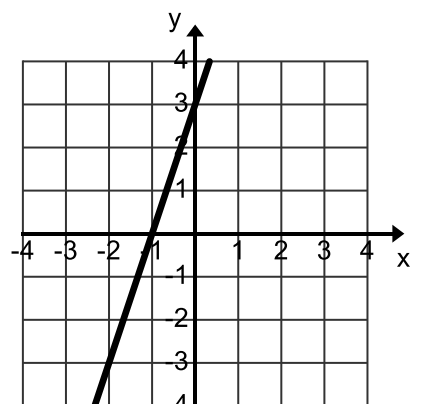
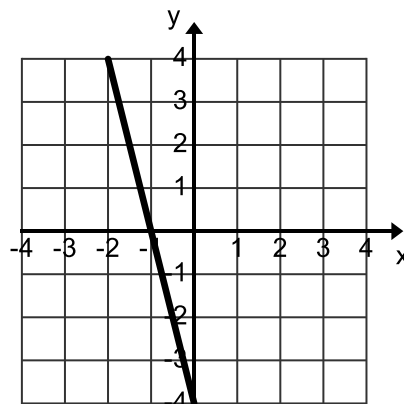
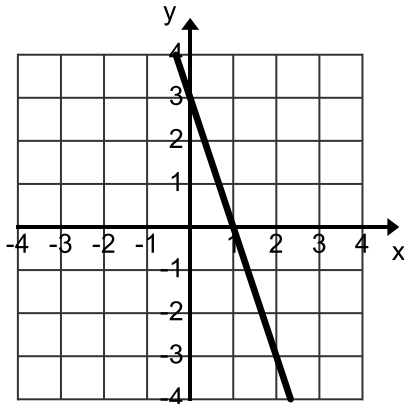
5. x-intercept = _____

6. x-intercept = _____

y-intercept = _____

y-intercept = _____

y-intercept = _____



Determine the x and y-intercepts of the given functions.

7. $f(x) = 3x - 9$ x-intercept = _____ y-intercept = _____

8. $f(x) = 6x - 24$ x-intercept = _____ y-intercept = _____

9. $f(x) = \frac{1}{2}x - 4$ x-intercept = _____ y-intercept = _____

10. If the domain of $f(x) = 2x - 1$ is $\{3, 5, 10\}$, what is the range? _____

11. If the domain of $f(x) = -x - 1$ is $\{-4, 1, 0\}$, what is the range? _____

12. If the domain of $f(x) = -2x - 1$ is $\{-3, 0, 8\}$, what is the range? _____

13. If the domain of $f(x) = \frac{1}{2}x - 1$ is $\{-8, -4, 1\}$, what is the range? _____

| Chart 1 | |
|---------|----|
| x | y |
| 5 | -2 |
| 4 | -3 |
| 7 | -9 |
| ? | ? |

| Chart 2 | |
|---------|---|
| x | y |
| 1 | 6 |
| 2 | 8 |
| 3 | 4 |
| ? | ? |

| Chart 3 | |
|---------|----|
| x | y |
| 0 | -6 |
| 6 | -8 |
| 8 | -1 |
| ? | ? |

____ 14. Which elements can replace the missing values (the ? marks) in Chart 1 to create a relation that is NOT a function?

| A | |
|---|----|
| x | y |
| 3 | 11 |

| B | |
|---|---|
| x | y |
| 4 | 7 |

| C | |
|---|----|
| x | y |
| 6 | -2 |

| D | |
|---|----|
| x | y |
| 0 | -2 |

____ 15. Which elements can replace the missing values (the ? marks) in Chart 2 to create a relation that is NOT a function?

| A | |
|---|---|
| x | y |
| 3 | 5 |

| B | |
|---|---|
| x | y |
| 4 | 8 |

| C | |
|---|----|
| x | y |
| 9 | -4 |

| D | |
|---|---|
| x | y |
| 7 | 7 |

____ 16. Which elements can replace the missing values (the ? marks) in Chart 3 to create a relation that is NOT a function?

| A | |
|---|----|
| x | y |
| 5 | 16 |

| B | |
|----|---|
| x | y |
| 11 | 1 |

| C | |
|---|---|
| x | y |
| 1 | 4 |

| D | |
|---|---|
| x | y |
| 0 | 8 |