

Gradient Intercept and General Form Conversion

Example Problems

EXAMPLE 1:

SOLUTION:

EXAMPLE 2:

SOLUTION:

EXAMPLE 3:

SOLUTION:

Question Bank

NOTE: Any questions where you get a decimal or fraction as an answer can be rounded to 2 decimal places or left as an exact value.

1. Equations of the form $y = mx + c$ are in gradient-intercept form. So called, because m (the coefficient of x) tells you the gradient of the line and c tells you the y -intercept of the line. As a warm up, for each of the following equations determine i) their gradient, and ii) their y -intercept.

a) $y = 2x + 5$

f) $y = \frac{1}{3}x - 3$

b) $y = 3x - 2$

g) $y = \frac{x}{2} + 23$

c) $y = -x + 3$

h) $y = -\frac{3}{7}x - \frac{4}{9}$

d) $y = -3x + 13$

i) $y = -\frac{2x}{5} + \frac{6}{5}$

e) $y = 155x + 240$

Answers

- | | | | | | | | |
|----|----|-----|---------------|--|-----|-----|----------------|
| 1. | a) | i) | 2 | | ii) | -3 | |
| | | ii) | 5 | | | | |
| | b) | i) | 3 | | g) | i) | $\frac{1}{2}$ |
| | | ii) | -2 | | | ii) | 23 |
| | c) | i) | -1 | | | | |
| | | ii) | 3 | | h) | i) | $-\frac{3}{7}$ |
| | d) | i) | -3 | | | ii) | $-\frac{4}{9}$ |
| | | ii) | 13 | | | | |
| | e) | i) | 155 | | i) | i) | $-\frac{2}{5}$ |
| | | ii) | 240 | | | ii) | $\frac{6}{5}$ |
| | f) | i) | $\frac{1}{3}$ | | | | |