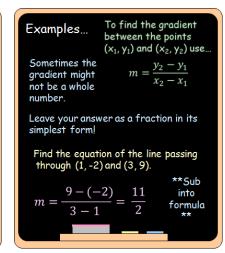
# Outcome 1 - Calculating the gradient between two points

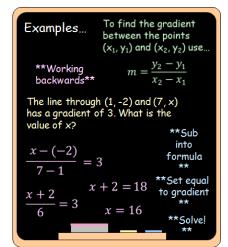
## Bronze example

### To find the gradient Examples... between the points $(x_1, y_1)$ and $(x_2, y_2)$ use.. Find the $m = \frac{y_2 - y_1}{}$ of the $x_2 - x_1$ line passing through (1, -2) and (2, 5). \*\*Sub into formula Lines that slope... upwards have a positive gradient. downwards have a negative gradient. Horizontal lines have a gradient of zero.

## Silver example



## Gold example

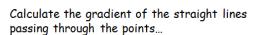


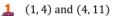
## **Bronze Questions**

Calculate the gradient of the straight lines passing through the points...

- (2,4) and (4,10) (5,3) and (7,11)
- - (4,2) and (6,12)  $\triangleq$  (2,1) and (5,10)
- - (1,-3) and (5,9) (1,-1) and (4,5)
- (1, 8) and (3, 4)
- (2, 10) and (6, -2)
- (-1,4) and (4,9) (2,3) and (4,-7)

## Silver Questions







(4, 2) and (9, 10) (4, 2) and (7, 12)

(1,-3) and (3,10) (2,-1) and (6,6)

(1,9) and (6,7) (-2,-9) and (0,2)

(-1,9) and (5,8) (1,0) and (5,-5)

## Gold Questions

For each of the following, work out the value of the missing letter...



(1,5) and (3,z) m=5

(0,1) and (5,d) m=2

(-1, 4) and (h, 12)

5 (2, n) and (3, -6)m = -3

(g, -8) and (7, 2) m = 5

## Bronze Answers

- 1. m = 3 2. m = 4 3. m = 5 4. m = 3

- 5. m = 3 6. m = 2 7. m = -2 8. m = -3 9. m = 1 10. m = -5

## Silver Answers

- 1. m = 7/3
- 3. m = 8/5
- 5. m = 13/2
- 7. m = -2/5
- 7. m = -2/5 8. m = 11/2 9. m = -1/6 10. m = -5/4
- 2. m = 1/3
  - 4. m = 10/3
- 6. m = 7/4
  - 8. m = 11/2

## Gold Answers

- 1. y = 10 2. z = 15
- 3. d = 11 4. h = 3
- 5. n = -3 6. g = 5