GRADIENT BETWEEN TWO COORDINATES

Answer all of these questions. Remember to show your working out in all questions.

MAIN QUESTIONS

1.	(2, 3) and (5, 7)	4/3	2.	(1, 1) and (4, 9)	8/3
3.	(0, 0) and (3, 6)	2	4.	(-1, 2) and (3, 10)	2
5.	(5, 7) and (1, 3)	1	6.	(2, 4) and (6, 16)	3
7.	(-3, -5) and (1, 3)	2	8.	(4, 1) and (8, 5)	1
9.	(0, 5) and (5, 0)	-1	10.	(7, 2) and (3, 6)	-1
11.	(1, 1) and (1, 5) Undefin	ned	12.	(3, 4) and (7, 4)	0
13.	(-2, -3) and (4, 9)	2	14.	(6, 2) and (2, 6)	-1
15.	(5, 10) and (10, 20)	2	16.	(8, 3) and (2, 9)	-1
17.	(-4, -6) and (0, 0)	1.5	18.	(3, 7) and (3, 2) Undef	ined
19.	(9, 5) and (6, 5)	0	20.	(10, 20) and (5, 10)	2

MASTER QUESTIONS

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M1.	A line passes through the points (2, 3) and (5, 7). Find its gradient.
M2.	A hill rises 50 metres over a horizontal distance of 200 metres. 0.25 Calculate the gradient.
M3.	A road has a gradient of 0.15. How much does it rise over a horizontal distance of 80 metres?
M4.	A line has a gradient of 2 and passes through the points (1, 1) and (3, y). Find y.
M5.	A line segment joins (4, 1) to (8, 5). Another joins (3, 6) to (7, 2). No Are they parallel?
M6.	A staircase has a rise of 18cm for each 24cm tread. What is its 0.75 gradient?
M7.	A line passes through $(0, 0)$ and (a, b) with gradient 3. Express b in terms of a.
M8.	Two points (3, y) and (7, 11) have a gradient of 2. Find y.
M9.	A line with gradient -1 passes through (5, 5). Find another (6, 4) point on the line.
M10.	A line segment from (1, 4) to (5, 12) is extended to (9, y). Find y. 20