

True or False? Parallel and Perpendicular Lines

For each statement, circle the correct response.

1	The lines with equations $y = -2x + 1$ and $y = -2x + 7$ are parallel to each other	True	False
2	Two straight lines are parallel if their gradients multiply to give -1	True	False
3	The point $(2, 3)$ lies on the line with equation $y = \frac{1}{2}x + 2$	True	False
4	The lines with equations $y = 3x - 5$ and $y = 5 - 3x$ are perpendicular to each other	True	False
5	Straight lines with gradients -4 and $-\frac{1}{4}$ meet at 90°	True	False
6	The points $(5, -2)$ and $(1, 7)$ lie on the line with equation $2x + y = 8$	True	False
7	The lines with equations $y = \frac{2}{3}x + 4$ and $y = -\frac{3}{2}x - 1$ are perpendicular to each other	True	False
8	The lines with equations $y = -3x + 1$ and $6x - 2y = 10$ are parallel to each other.	True	False
9	The straight lines with equations $5x + y = 15$ and $y = -\frac{1}{5}x + \frac{8}{5}$ are perpendicular to each other	True	False
10	The line with equation $5x - 4y + 3 = 0$ is parallel to the line with equation $10y - 8x = 3$	True	False
11	The lines with equations $2x + 7y = 10$ and $14x = 4y + 17$ are perpendicular to each other and meet at the point $(1.5, 1)$	True	False