

ESERCIZI

Determina le equazioni delle rette passanti per le seguenti coppie di punti:

1. A (-2, 1) B (7, -4)

2. A (0, 5) B (3, -3)

3. A (12, -1) B (-1, -10)

4. A (8, -1/2) B (-2, -1/3)

5. A (0, 5) B (3, -3)

6. A (4/9, -4) B (1, 2)

7. A (16, 9/2) B (11, 2)

8. A (25/3, 1/3) B (1, -2/3)

9. A (20, 14) B (6, 1)

10. A (-18/5, 0) B (0, 42)

SVOLGIMENTO E SOLUZIONI

1. A (-2, 1)

$$rA: 1 = -2m + q$$

$$q = 1 + 2m$$

$$q = -1/9$$

$$r: 9y + 5x + 1 = 0$$

B (7, -4)

$$rB: -4 = 7m + q$$

$$-4 = 7m + 1 + 2m$$

$$m = -5/9$$

2. A (0, 5)

$$rA: 5 = q$$

B (3, -3)

$$rB: -3 = 3m + q$$

$$-3 = 3m + 5$$

$$m = -8/3$$

$$r: 3y + 8x - 15 = 0$$

3. A (12, -1)

$$rA: -1 = 12m + q$$

$$q = -1 - 12m$$

$$q = -121/13$$

$$r: 13y - 9x + 121 = 0$$

B (-1, -10)

$$rB: -10 = -m + q$$

$$-10 = -m - 1 - 12m$$

$$m = 9/13$$

4. A (8, -1/2)

$$rA: -1/2 = 8m + q$$

$$q = -1/2 - 8m$$

$$q = -11/30$$

$$r: 60y + x + 22 = 0$$

B (-2, -1/3)

$$rB: -1/3 = -2m + q$$

$$-1/3 = -2m - 1/2 - 8m$$

$$m = -1/60$$

5. A (0, 5)

$$rA: 5 = q$$

B (3, -3)

$$rB: -3 = 3m + q$$

$$-3 = 3m + 5$$

$$m = -8/3$$

$$r: 3y + 8x - 15 = 0$$

6. A (4/9, -4)

$$rA: -4 = (4/9)m + q$$

$$q = -4 - (4/9)m$$

$$q = -44/5$$

$$r: 5y - 54x + 44 = 0$$

B (1, 2)

$$rB: 2 = m + q$$

$$2 = m - 4 - (4/9)m$$

$$m = 54/5$$

7. A (16, 9/2)

$$rA: 9/2 = 16m + q$$

$$q = 9/2 - 16m$$

$$q = -7/2$$

$$r: 2y - x + 7 = 0$$

B (11, 2)

$$rB: 2 = 11m + q$$

$$2 = 11m + 9/2 - 16m$$

$$m = 1/2$$

8. A (25/3, 1/3)

$$rA: 1/3 = (25/3)m + q$$

$$q = 1/3 - (25/3)m$$

$$q = -53/66$$

$$r: 66y - 9x + 53 = 0$$

B (1, -2/3)

$$rB: -2/3 = m + q$$

$$-2/3 = m + 1/3 - (25/3)m$$

$$m = 3/22$$

9. A (20, 14)

B (6, 1)

$$rA: 14 = 20m + q$$

$$rB: 1 = 6m + q$$

$$q = 14 - 20m$$

$$1 = m + 14 - 20m$$

$$m = 13/19$$

$$q = 6/19$$

$$r: 19y - 6x - 13 = 0$$

10. A (-18/5, 0)

B (0, 42)

$$rA: 0 = (-18/5)m + q$$

$$rB: 42 = q$$

$$(18/5)m = 42$$

$$m = 35/3$$

$$r: 3y - 126x - 35 = 0$$