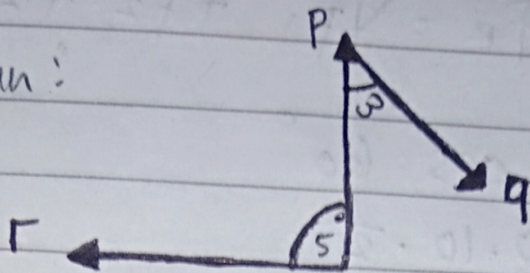


No.:

## Ulangan Harian

Date:

(1) jawaban:



Diket:

(2)  $v_1 = 4 \text{ m/s}$

$v_2 = 3 \text{ m/s}$

$v = ?$

Jawaban:

$$v_t = \sqrt{v_1^2 + v_2^2}$$

$$= \sqrt{4^2 + 3^2}$$

$$= \sqrt{16 + 9}$$

$$= \sqrt{25}$$

$$v_t = 5 \text{ m/s}$$

arah waktu terhadap vertikal

$$v_i = v_t \sin \theta$$

$$4 = 5 \sin \theta$$

$$\sin \theta = \frac{4}{5}$$

$$\sin \theta = 0.8$$

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(3)

$$\text{Jawaban: } F_1 + F_2 = F_R = \sqrt{F_1^2 + F_2^2 + 2 \cdot F_1 \cdot F_2 \cos 60^\circ}$$

$$F_1 = 20 \text{ N}, F_2 = 10 \text{ N} \quad \cos = 60^\circ$$

$$R = \sqrt{20^2 + 10^2 + 2 \cdot 20 \cdot 10 \cdot \frac{1}{2}}$$

$$= \sqrt{400 + 100 + 2 \cdot 20 \cdot 10 \cdot \frac{1}{2}}$$

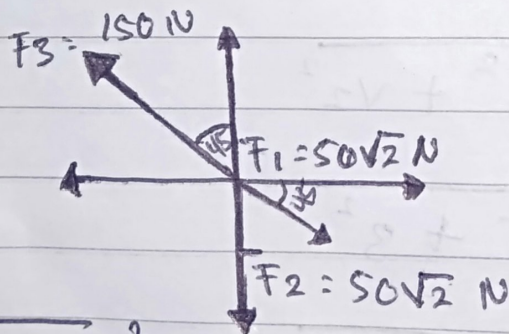
$$= \sqrt{500 + 200}$$

$$= \sqrt{700}$$

$$= \sqrt{100 \cdot 7} =$$

$$R = 10\sqrt{7} \text{ N}$$

(4)



$$R = 150 - 100 \text{ N}$$

$$= 50 \text{ N}$$

$$R = \sqrt{F_1^2 + F_2^2}$$

$$= \sqrt{(50\sqrt{2})^2 + (50\sqrt{2})^2} \cos 90^\circ$$

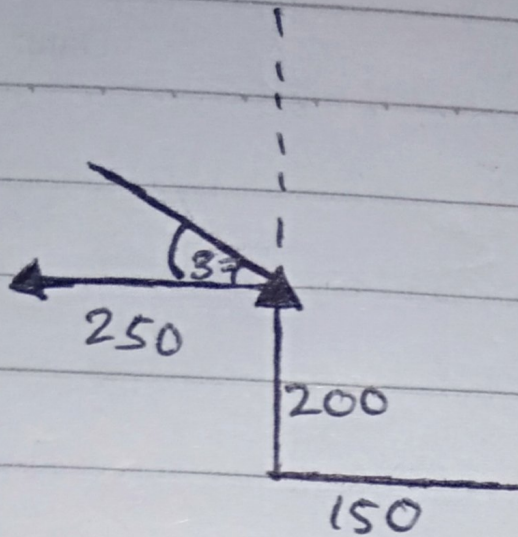
$$= \sqrt{5.000 + 5.000 + 0}$$

$$= \sqrt{10.000} = 100 \text{ N}$$

No.:

Date:

(5)



$$\text{Dik} : F_1 = 150$$

$$F_2 = 200$$

$$F_3 = 250$$

$$\text{Dit} : R = ?$$

$$R = \sqrt{F_x^2 + F_y^2}$$

$$R = \sqrt{150^2 + 200^2}$$

$$= \sqrt{22500 + 40000}$$

$$= \sqrt{62500} = 250$$

$$R = 250 - 250$$

$$= 0$$