school nova™

1. What number should be placed instead of "?" ?

```
[ ? ] —12→ ◯ :15→ ◯ ·25→ ◯ +75→ [ −75 ]
```

```
[ 210 ] :(−7)→ ◯ +? ◯ ·(−6)→ ◯ −320→ [ −20 ]
```

```
[ −46 ] −24 ◯ ·? ◯ −320 ◯ :(−8)→ [ 5 ]
```
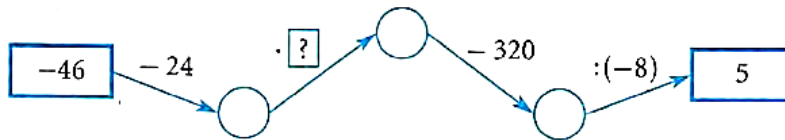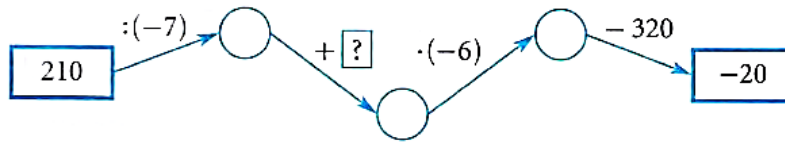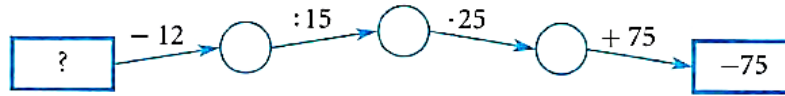
2. Represent the following values of speed in $\frac{km}{h}$ units and connect to the appropriate pictures.

$$1.83\,\frac{km}{min} =$$

$$91.7\,\frac{m}{min} =$$

$$5.4\,\frac{m}{h} =$$
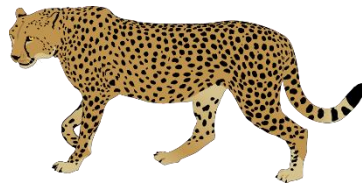
3. In a dried fruit mix, there are 7parts of dried apples, 4 parts of dried pears and 5 parts of dried apricots. What is the weight (how many grams) of apples, pears, and apricots in the fruit mix, if the total weight of the mix is 1600g?

4. In order to prepare a homemade dried fruits and nuts mix Mary took 6 parts of raisins, 5 parts of dried cranberries and 3 parts of walnuts. Cranberries and walnuts altogether weighted 2 kg 400 g. What was the weight of the mix that Mary prepared?

5. The speed of the boat in a still water on a lake is 12 km/h. The speed of the river flow is 3 km/h. How many hours does the boat need to go from the city A to the city B if the distance between the two cities is 45 km and the city A is up on the river, i.e. the river flows from A to B?

   How many hours does this boat need to go back from the city B to the city A?