6.RP Shirt Sale

Alignments to Content Standards: 6.RP.A.3.c

Task

Selina bought a shirt on sale that was 20% less than the original price. The original price was $5 more than the sale price. What was the original price? Explain or show work.
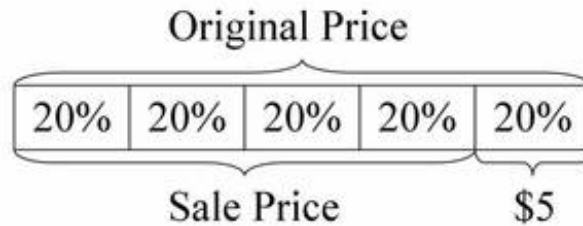
IM Commentary

There are several different ways to reason through this problem; two approaches are shown.

Solutions

Edit this solution
Solution: Tape diagram

Solution: A tape diagram (known in some circles as a strip or bar diagram) shows the solution in a very succinct way:

Since the difference between the original price and the sale price is $5, which is also 20% of the original price, the original price is 5 times $5.

The original price was $25.

Solution: Dividing by a fraction

We know that 20% of the original price is $5. Furthermore, 20% of the original price is the same thing as $\frac{20}{100} = \frac{1}{5}$ of the original price. We know that $\frac{1}{5}$ of a quantity is 5, so we can solve this problem by dividing 5 by $\frac{1}{5}$ (this is a Group Size Unknown problem).

$$5 \div \frac{1}{5} = 25$$

So the original price was $25.