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

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.

Edit this solution

**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).

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

So the original price was $25.