Solve each problem using a tape diagram.

1) At Gwen's Ice Cream Emporium they sold 539 ice cream cones in a day. \( \frac{5}{7} \) of them sold were chocolate. \( \frac{1}{2} \) of the ones that weren't chocolate were vanilla. And the remaining were pistachio. How many pistachio cones did they sell?

2) A game store had 50 amiibo they were trying to sell. They sold \( \frac{2}{5} \) at normal price. Then they sold \( \frac{1}{3} \) of the ones that were left at a discount. How many amiibo did they have left after selling the discount ones?

3) On Debby's phone \( \frac{1}{9} \) of the pictures were selfies. Of the other pictures on her phone \( \frac{5}{8} \) were of her cat. If she has 468 pictures on her phone, how many are not of her cat or selfies?

4) Rachel went shopping on Black Friday. She spent $588 total. \( \frac{2}{6} \) of what she spent was at Best Buy. She spent \( \frac{2}{4} \) of what was left at Kohls and the rest she spent at Target. How much did she spend at Target?

5) A store started with 540 sodas. They sold \( \frac{2}{6} \) of them over the next month and they had to throw out \( \frac{3}{4} \) of the ones that were left because they were expired. How many sodas did they have at the end?

Answers:

1. 
2. 
3. 
4. 
5. 

1) At Gwen's Ice Cream Emporium they sold 539 ice cream cones in a day. \( \frac{5}{7} \) of them sold were chocolate. \( \frac{1}{2} \) of the ones that weren't chocolate were vanilla. And the remaining were pistachio. How many pistachio cones did they sell?

\[
\begin{aligned}
&\text{C} & \text{C} & \text{C} & \text{C} & \text{C} & \text{V} & \text{P} \\
&539 & & & & & & \\
\end{aligned}
\]

\( P = \text{Pistachio} \)
\( C = \text{Chocolate} \)
\( V = \text{Vanilla} \)

2) A game store had 50 amiibo they were trying to sell. They sold \( \frac{2}{5} \) at normal price. Then they sold \( \frac{1}{3} \) of the ones that were left at a discount. How many amiibo did they have left after selling the discount ones?

\[
\begin{aligned}
&\text{NP} & \text{NP} & \text{D} & \text{L} & \text{L} \\
&50 & & & & & & \\
\end{aligned}
\]

\( L = \text{Left} \)
\( \text{NP} = \text{normal} \)
\( D = \text{Discount} \)

3) On Debby's phone \( \frac{1}{9} \) of the pictures were selfies. Of the other pictures on her phone \( \frac{5}{8} \) were of her cat. If she has 468 pictures on her phone, how many are not of her cat or selfies?

\[
\begin{aligned}
&S & \text{C} & \text{C} & \text{C} & \text{C} & \text{C} & \text{O} & \text{O} & \text{O} \\
&468 & & & & & & & & \\
\end{aligned}
\]

\( O = \text{Other} \)
\( S = \text{Selfies} \)
\( C = \text{Cat} \)

4) Rachel went shopping on Black Friday. She spent $588 total. \( \frac{2}{6} \) of what she spent was at Best Buy. She spent \( \frac{2}{4} \) of what was left at Kohls and the rest she spent at Target. How much did she spend at Target?

\[
\begin{aligned}
&\text{BB} & \text{BB} & \text{K} & \text{K} & \text{T} & \text{T} \\
&588 & & & & & & \\
\end{aligned}
\]

\( T = \text{Target} \)
\( \text{BB} = \text{Best Buy} \)
\( K = \text{Kohls} \)

5) A store started with 540 sodas. They sold \( \frac{2}{6} \) of them over the next month and they had to throw out \( \frac{3}{4} \) of the ones that were left because they were expired. How many sodas did they have at the end?

\[
\begin{aligned}
&S & \text{S} & \text{E} & \text{E} & \text{E} & \text{L} \\
&540 & & & & & & \\
\end{aligned}
\]

\( L = \text{Left} \)
\( S = \text{Sold} \)
\( E = \text{Expired} \)