Warm Up

Solve for x:

1. 3x + 7 + 4x = 56

\[
\begin{align*}
7x + 7 &= 56 \\
7x &= 49 \\
x &= 7
\end{align*}
\]

2. 6x + 9 = 4x + 31

\[
\begin{align*}
2x + 9 &= 31 \\
2x &= 22 \\
x &= 11
\end{align*}
\]
Identifying Angles
Complementary Angles - Angles that make a 90 degree angle

Supplementary Angles - Angles that make a 180 degree angle
Can you identify the complementary and supplementary angles?

- Complementary angles: 64° and 26°, 30° and 30°, 45° and 45°, 52° and 38°.
- Supplementary angles: 135° and 45°, 90° and 90°.
$8910 - \frac{53}{37} \Rightarrow x = 37^\circ$

$180 - 121 \Rightarrow \frac{59}{59} \Rightarrow x = 59^\circ$

$180 - 145 \Rightarrow \frac{35}{35}$
Vertical Angles

Angles opposite of each other when two lines cross

\[ \angle a = \angle c \]
\[ \angle b = \angle d \]
Which pair(s) of angles are vertical? 

\[ \angle 3, \angle 1, \angle 4, \angle 2 \]
If angle A is 152 degrees, what are the measures of angles b, c and d.