

Names:

Section 3.6

1. In 2002, crude oil production by OPEC was about 28.7 million barrels per day. In 2007, crude oil production had risen to about 34.5 million barrels per day.

(a) Find the linear equation for daily crude oil production y in terms of the number of years past 2002, x .

(b) Use the equation from (a) to predict the daily crude oil production by OPEC in 2015.

(c) In what year would production be 50 million barrels per day?

2. Solve $3(2 - 4x) - 5(3x - 7) = 9x + 4$.

3. The equation of one line is $y = \frac{2}{3}x + 5$ and the equation of a second line is $2x + 3y = 7$.
Are the lines parallel, perpendicular, or neither?

4. Solve $|4x + 3| = |5x - 2|$.