

Writing Equations in $Ax + By = C$ to describe real situations:

Write an equation in $Ax + By = C$ for each situation:

1. A company will charge \$3 to ship a medium size box to China, and \$4 to ship a large box to China. Write an equation to represent the amount of boxes the company could ship if their shipping budget is 132 dollars.

Define your variables:
 Let ___ = _____ Equation: _____
 Let ___ = _____

2. Jenny is making a scrapbook of her senior year. She needs to get some pictures printed. She finds an online company that will print and send her 3x5 pictures for 20¢ each and 4x6 pictures for 30¢ each. If she is only allowed to order \$10.00 worth of pictures, write an equation to represent the amount of each size of picture she could order.

Define your variables:
 Let ___ = _____ Equation: _____
 Let ___ = _____

3. Jeff is packing a care box to send to his brother who is a soldier. He wants to send him his favorite cookies which weigh 10 oz. each and winter socks which weigh 22 oz per pair. He has been told that his box can weigh 8 pounds. Write an equation to represent the number of boxes of cookies and pairs of socks Jeff could pack for his brother. (Careful! The units must match, 1 lb = 16 oz)

Define your variables:
 Let ___ = _____ Equation: _____
 Let ___ = _____

4. Julie is trying to lose weight. She decides to try to burn calories by walking or jogging. She finds out that walking burns an average of 5 calories per minute, and jogging burns an average of 7 calories per minute. Write an equation to show the amount of walking or jogging Julie would need to do to burn an extra 300 calories.

Define your variables:
 Let ___ = _____ Equation: _____
 Let ___ = _____