## Name:

## Solving Equations Using Multiplication or Division

1) Your favourite rock band distributes one of its songs for free on its website. The size of the song file is 3584 kilobytes (KB). The table shows the maximum speed at which files can be downloaded using each type of Internet service offered in your town.

| Type of service | Dial-up | DSL | Cable |
| :--- | :--- | :--- | :--- |
| Download speed (KB/sec) | 7 | 96 | 188 |

To the nearest second, how long does it take to download the song file using:
a) Dial- up service?
b) DSL service?
c) Cable service?
2) The figure shown is composed of a triangle and a rectangle.

a. Write and simplify an expression in terms of $x$ for the area of the figure.
b. What is the value of $x$ if the area of the figure is 154 square feet?
3) A wristwatch has a built-in-digital camera with a rectangular viewfinder. An image shown by the viewfinder consists of 6240 tiny rectangular dots called pixels arranged in rows and columns. The viewfinder has 80 rows of pixels. How many columns does it have?
4) On July 1, 2001, weather station detected an average of 80 lightning strikes per minute over a 24 hour period. Find the total number of lightning strikes detected during that time.

