Review & Preview

4-43.   The trapezoids at right are similar.

M $\xrightarrow{20}$ A

11

T $\overset{\square}{\underline{\hspace{1cm}}}$ 30 E

E $\longrightarrow$ K

33

M $\square$ I

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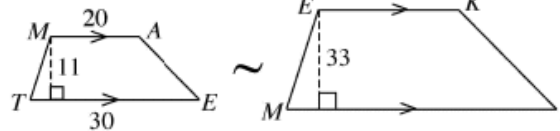
a.   What is the ratio of the heights?

b.   Compare the areas. What is the ratio of the areas?

4-44.   For each diagram below, write an equation and solve for x, if possible.

a.

$3x + 3°$

$x + 7°$

b.

$9x + 4°$

$3x + 14°$
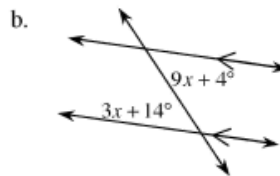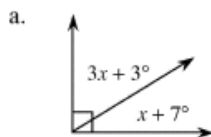
4-45.   Joan and Jim are planning a dinner menu including a main dish and dessert. They have 4 main dish choices (steak, tuna casserole, turkey burgers, and lasagna) and 3 dessert choices (brownies, ice cream, and chocolate chip cookies.) How many different dinner menus do they have to choose from? List all of the possible menus.

4-46.   Leon is standing 60 feet from a telephone pole. As he looks up, a red-tailed hawk lands on the top of the pole. Leon's angle of sight up to the bird is 22° and his eyes are 5.2 feet above the ground.

a.   Draw a detailed picture of this situation. Label with all of the given information.

b.   How tall is the pole? Show all of your work.

4-47.   Find the value of x in the triangle at right. Refer to problem 4-8 for help. Show all work.

$x + 3$ 26

10