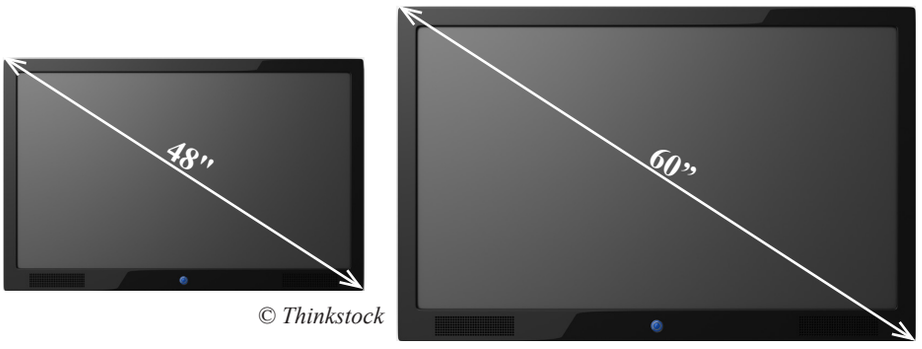
Unit 5: Proportional Reasoning Lesson 5.2

Coach's Corner – III

1. Determine the scale factor of a miniature version of the CFL Grey Cup with a chalice height of 3 inches if the original cup's chalice height is 13 inches. State the scale factor to the nearest tenth of a percent.

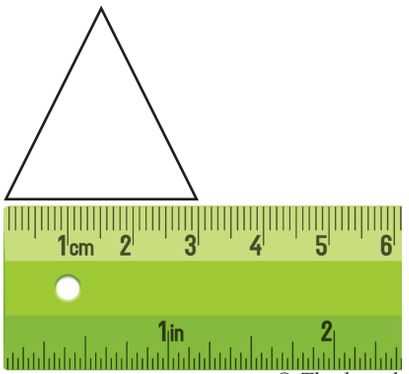
2. Taylor bought a 48" LED TV that has a height of 2 feet. Adam bought a 60" LED TV.

   a. To the nearest inch, what is the height of Adam's TV?



b. Using Pythgorean's theorem ($a^2 + b^2 = c^2$), determine the width of Adam's 60" LED TV.

3. Draw an enlargement, with a scale factor of $\frac{8}{3}$, of an equilateral triangle with a side length of 3 cm.



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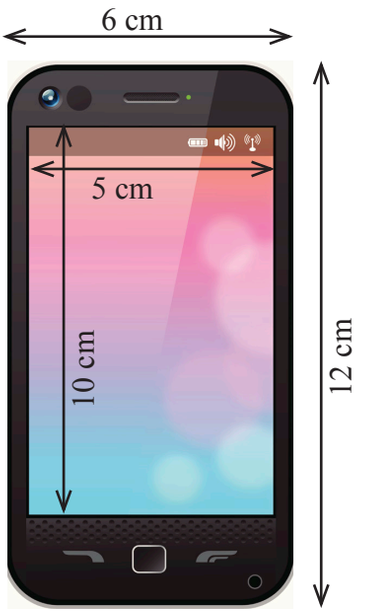
4. Draw a scale diagram of this cellular phone using a scale factor of 0.75.



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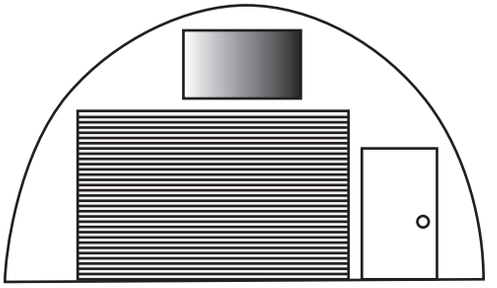
Your Calculations

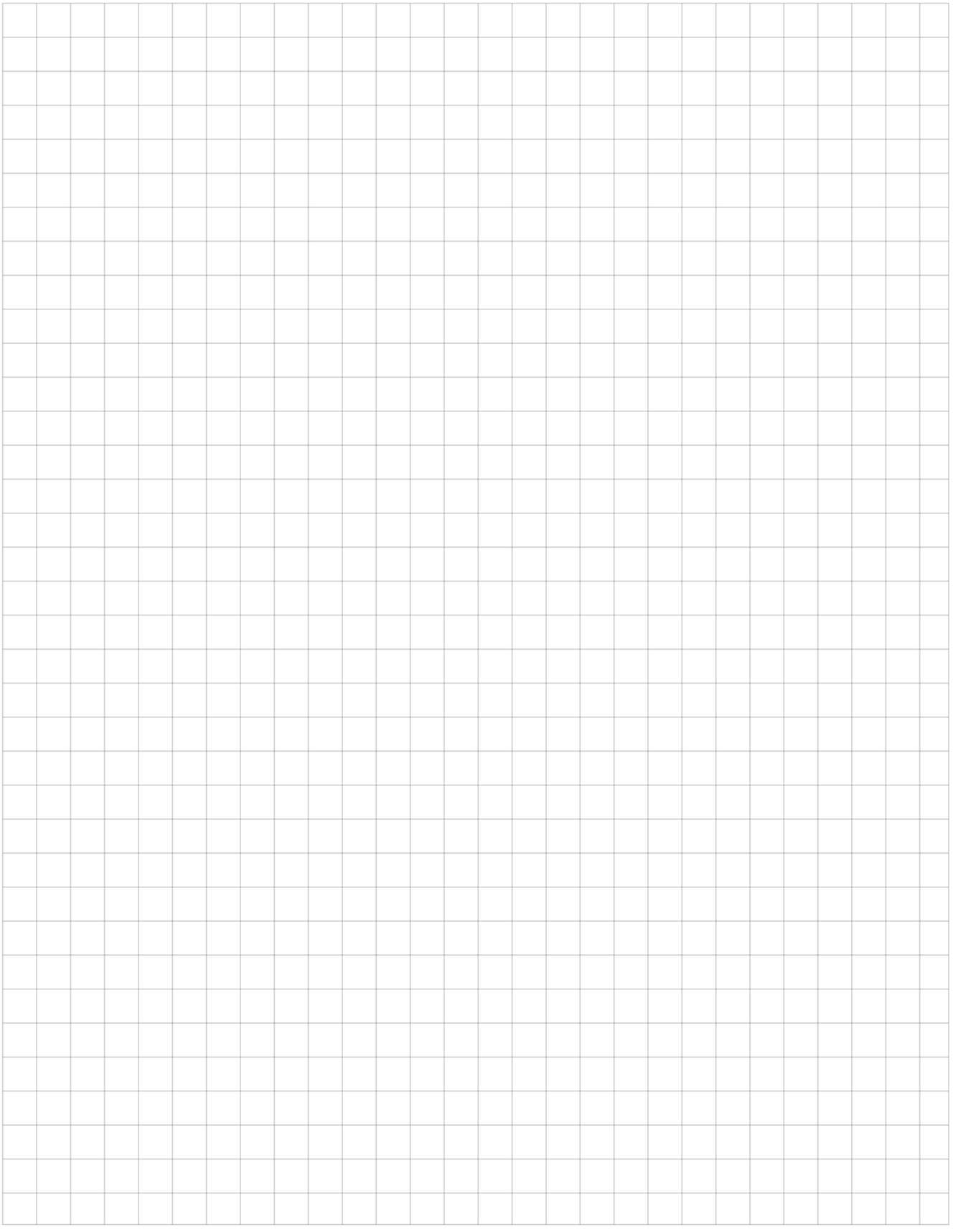
Phone length:	**Phone width:**
Screen length:	**Screen width:**

5. Create a scale diagram of the floor plan of a quonset hut that will have enough room to comfortably house a horse, a mother pig and 12 piglets, a dairy cow, and a chicken coop with 6 chickens. The following table outlines the space requirements of each type of animal. Note that there should be at least two feet of space between each animal enclosure. The door side of the quonset hut should be clear of any enclosures for easy entry and exit.

	Measurments
Quonset hut	28 ft × 38 ft
Horse enclosure	14 ft × 14 ft
Pig and 12 piglets enclosure	16 ft × 20 ft
Cow open-sided enclosure	8 ft × 14 ft
Chicken coop with 6 chickens	3 ft × 5 ft

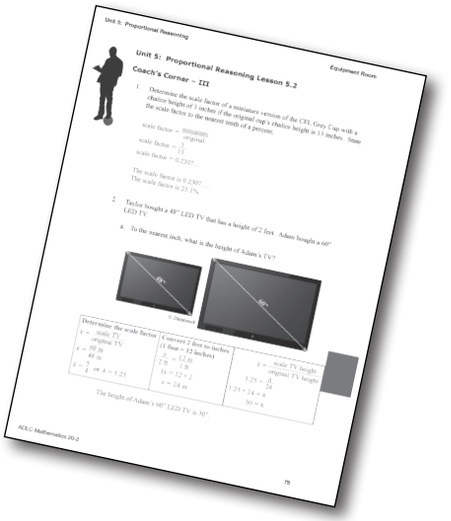


Use a scale of $\frac{1}{4}$ inch $=$ 1 foot.



Please go to the *Equipment Room* to check your solutions before proceeding to *Game On!*, on the next page of this *Workbook*..

After you have assessed your work, reflect upon your understanding of the concepts addressed in the *Coach's Corner* exercises in the table provided.



Question Number	Got it!	Almost there…	Need to retry or ask for help.
1			
2			
3			
4			
5			

Note: Before you complete *Game On!*, you may review your skills and get more practice by completing the following problems in *Principles of Mathematics 11*.

- Page 471, #3, 4, 11, 13a, 14, 17, and 18
- Page 489, #1, 2, 6, 8, 9, 11, and 13

Check your work in *Strengthening and Conditioning*.