Warmup 3/(# of acute angles in a right triangle)



3) Remembering the 180 rule for triangles...why don't the three numbers from the problem in #1 add up to 180?





Return Transformations Quizzes

- · May retake Part 1, Part 2, or both
- To be eligible for a retake, you must do corrections (in pen ON THE ORIGINAL QUIZ) AND the extra practice worksheet.





Common Pythagorean Triples

• 3, 4, 5

- 5, 12, 13
- 8, 15, 17
- 7, 24, 25

• MEMORIZE THESE!!! (It will pay off!)



Common Pythagorean Triples 3, 4, 5 5, 12, 13 8, 15, 17 7, 24, 25 * any multiple of these! $3, 4, 5 \xrightarrow{x^2} 6, 8, 10$ $3, 4, 5 \xrightarrow{x^3} 9, 12, 15$ $3, 4, 5 \xrightarrow{x^6} 18, 24, 30$ $3, 4, 5 \xrightarrow{x100} 300, 400, 500$































Today: Pythagorean Theorem Applications

- Real-world situations where the Pythagorean Theorem is used
- · Still on the "Pythagorean Theorem" page of notes



Application: Ladders

- A 15-foot ladder is propped up against a 15 foot-tall building. The bottom of the ladder is 4 feet from the building. How high up the building does the ladder reach? Draw a picture and use it to solve!
- If you want to position the ladder so that it will exactly reach a window whose windowsill is 2 feet from the top of the building, how far from the building would you have to position the bottom of the ladder?
- CHALLENGE/Early Finisher: How far away from the building does the bottom have to be so that the distance from the ladder to the building is the same as the distance from the ground up to the top of the ladder? (Also, does this seem safe?)







Homework:

"Measuring Your TV" Sheet

- Go home and find out what size TV you have. Hopefully, your parents will remember, or you can find the box or something.
- Measure the length and width of the TV, then check the math to see if you get the right diagonal length.
- + ALEKS