

Each WA is worth 10 points. Work right on these pages, then scan and upload or give to me in print. You can work together or see a tutor, but NEVER copy. This WA is for a grade, so dishonesty or cutting corners may earn a 0 for all involved.

1. [1.5 pts - 0.5 each] Convert (and round) as indicated. Show work as needed.

(a) 0.058% to a decimal value, no rounding

(b) 17.283 to a percent, no rounding

(c) $83/45$ to a percent, rounded to the nearest tenth of a percent

2. [3 pts - 1 each] Show work as needed to solve. If needed, round percent answers to the nearest tenth of a percent; round non-percent answers to the nearest hundredth.

(a) 5.189 is what percent of 7.54?

(b) 152% of 63.7 is what number?

(c) 527.8 is 76.2% of x . Find x .

3. [2 pts] Jax planted 3.78 acres of potatoes in 2020. He planted 2.4 acres in 2017. Is this a percent increase or decrease, and by what percent? Show clear work, and round to the nearest tenth of a percent.
4. [2 pts - 0.5 each] For each situation below, say Yes or No to whether it is meaningful to apply the percent to the other number shown. Briefly justify each response by referring to “older numbers” in the problem.
- (a) Greta paid \$21.73 for an SRU t-shirt that was marked 10% off.
 - (b) Reva’s school has experienced a 5.2% enrollment increase this year, bringing the total enrollment to 5,248.
 - (c) The water level in the reservoir is down 4.8% from last year’s level of 19.7 feet.
 - (d) Turnpike tolls will go up 2.1% next year. My commute currently costs \$3.50 every day.
5. [1.5 pts] Consider this problem: “Tony paid \$155.80 for his train ticket, which included 20% tax and fees. What was the base price of the ticket alone?”

Use Polya’s Fourth Step (Look Back) to SHOW why taking 20% times \$155.80 and then subtracting that number off of \$155.80 gives a wrong answer; that is, CONFIRM that the supposed answer doesn’t “check out.” Give a sentence or two of explanation as well. (“Explain” doesn’t mean simply to write the answer in a sentence, but to discuss what you did/why.)