Name_____ Date_____ Period_____

LESSON 4-3 · SESSION 1 · PRACTICE · FORM A

Estimate with Benchmarks

Learning target – I can estimate a percent by comparing an amount to benchmark percents. · 6.AT.4

REMEMBER

- **Benchmarks**: 10%, 25%, 50%, 75%, 100%. Build other benchmarks from 10%: 20% = 2 × 10%, 30% = 3 × 10%.
- Name **the whole** (100%). 50% = half, 25% = whole ÷ 4, 10% = whole ÷ 10.
- Pick the benchmark amount **closest** to the part. Percent left = 100% − percent used.

WORKED EXAMPLE

A game download is 80 MB. 41 MB are done. About what percent is done?

Step 1 Whole: 80 MB is 100%.

Step 2 50% of 80 is 40 MB.

Step 3 41 MB is just over 40 MB.

Answer about 50%

WORDS **estimate** *(estimar)* · **benchmark percent** *(porcentaje de referencia)* · **the whole** *(el entero)*

PRACTICE

show your work · label units

1. About what percent? Name the closest benchmark: 10%, 25%, 50%, 75%, or 100%.

a. 41 out of 80 ≈ ___ %

b. 31 out of 120 ≈ ___ %

c. 19 out of 40 ≈ ___ %

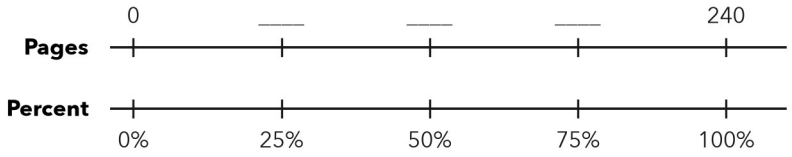
d. 47 out of 64 ≈ ___ %

e. 13 out of 120 ≈ ___ %

f. 58 out of 60 ≈ ___ %

2. **Reading Goal.** Ana's goal is 240 pages this month. She has read 118 pages. Fill in the double number line. Then estimate the percent of her goal read.

Hint *Each jump on the top line is 240 ÷ 4 pages.*



About_____ %

3. **Class Fundraiser.** A class wants to raise $400. So far it has raised $310.

Hint *Find 75% of $400 and compare.*

a. 10% of the goal _____

b. About what percent? _____ %

4. **Gym Water Jug.** A water jug holds 32 cups. It has 17 cups left.

a. Half of the jug, in cups _____

b. Percent left: about _____ %

5. Trail Progress. A hiking trail is 36 km long. A hiker has walked 27 km.

Hint *Find one fourth of 36 km first.*

a. Percent walked: about _____ %

b. Percent left: _____ %

Show your work.

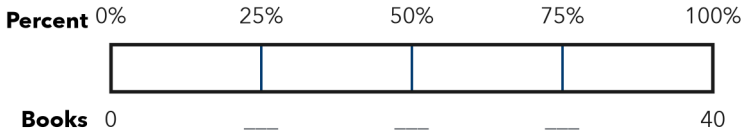
6. Estimate Check. Kwame says 19 out of 60 is about 50%. Is he right? Use 10% of 60 to find a better estimate.

Hint *Find 50% of 60 and 10% of 60.*

Show your work.

Better estimate_____

7. Book List. Jo's list has 40 books. She has read 34. Fill in the bar.



a. Between which two benchmarks is 34 out of 40? _____

b. Which benchmark is it closer to? _____ %

8. Chorus Tickets. A chorus printed 480 tickets for its concert. It has sold 47 of them.

a. About what percent are sold? _____ %

b. About what percent are not sold? _____ %

FIND THE ERROR

explain the mistake, then fix it

9. Elena's Work. A 200 GB drive has 150 GB used. 30 GB of that is music. Elena says music is about 75% of the drive. Explain her mistake. Estimate the percent that is music.

_____

_____

_____

TEST PRACTICE

choose the best answer

10. 10% of an amount is the same as –

A one half **B** one tenth **C** one fourth **D** ten times it

11. 14 out of 60 is about –

A 10% **B** 25% **C** 50% **D** 75%

SELF-CHECK CODE

find your answer · copy its letter into that problem's box · spell a math word

$40 E	10% S	75% A	$4 Z	16 R	90% T	25% E	80% X	50% N	47% Q

#2	#3a	#3b	#4a	#5b	#8a	#8b

CHECK YOURSELF ☐ I can do this on my own ☐ I need a little help ☐ I have a question about #____