

Basketball Percentages

Turn shots made into fractions, decimals and percents.
Problems get harder as you go. Show your work!

Name _____

Date _____

SHOT MATH: 3 WAYS TO SAY IT

8/10

 made ÷ tries
(fraction)

0.8

decimal

80%

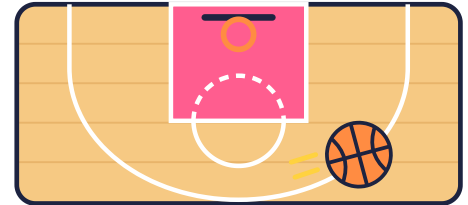
percent

× 100

 decimal to
percent

10%

of 50 is 5



ROOKIE

- 1** Maya makes **8 of her 10** free throws. What percent did she make?

WORK SPACE

_____ %

ROOKIE

- 2** Write the fraction **3/5** as a decimal and as a percent.

WORK SPACE

_____ = _____ %

STARTER

- 3** Jordan makes **9 of 12** shots. What is his shooting percentage?

WORK SPACE

_____ %

STARTER

- 4** The Comets make **14 of 20** two-point shots. What percent of those shots did they **miss**?

WORK SPACE

_____ %

PRO

- 5** Tess makes **85%** of her free throws. If she shoots **20** free throws, how many should she expect to make?

WORK SPACE

_____ free throws

PRO

- 6** Ben made **7 of 10** shots. Ari made **15 of 20**. Who shot a higher percentage, and by how many percentage points?

WORK SPACE

_____ by _____ pts

ALL-STAR

- 7** Leo made **18 of 24** shots in Game 1 and **12 of 16** in Game 2. What was his shooting percentage for **both games together**?

WORK SPACE

_____ %

CHALLENGE ★

- 8** Ava has made **12 of 20** three-pointers (60%). If she makes all of her next shots, how many does she need to reach **68%**?

WORK SPACE

_____ shots

A Shot Chart

Here are the shots each player on the Comets took in one game. Percent = made ÷ tries × 100.

PLAYER	MADE	TRIES	PERCENT	RANK
Riley	4	8		
Sam	6	10		
Kai	9	12		
Nia	13	20		
Team total				

- 1 Fill in each player's **percent**. Then rank them from 1 (best) to 4.
- 2 Add up the team's shots made and tries. What is the **team's** shooting percentage?
- 3 How many shots did the team **miss** in all?
- 4 Nia took the most shots. Did she have the best percentage? Explain.

B Game Day Percents

Use percents to solve each problem. Show your work in the dotted space.

- 1 The Otters scored **80** points last game and **96** points this game. By what **percent** did their score go up?

WORK SPACE

_____ %

- 2 The school gym holds **400** fans. Tonight it is **85%** full. How many fans are in the gym?

WORK SPACE

_____ fans

- 3 Jada scored **25%** of her team's **64** points. How many points did Jada score?

WORK SPACE

_____ points

- 4 The Foxes won **15 of their 24** games this season. What percent of their games did they win?

WORK SPACE

_____ %

Answer Key (for teachers & parents)

Answers for **Basketball Percentages**, with the work shown where it helps. Print pages 1 and 2 for students, and keep this page for checking.

Page 1 Problems

- 80%** ($8 \div 10 = 0.8$)
- 0.6 = 60%**
- 75%** ($9 \div 12 = 0.75$)
- 30%** (missed 6 of 20)
- 17** (0.85×20)
- Ari, by 5** (75% vs. 70%)
- 75%** ($30 \div 40$)
- 5 shots** ($17 \div 25 = 68\%$)

A • Shot Chart

- Kai 75% (1), Nia 65% (2), Sam 60% (3), Riley 50% (4)**
- 64%** ($32 \div 50$)
- 18 shots** ($50 - 32$)
- No.** Kai was best at 75%; Nia had 65%.

B • Game Day

- 20%** ($16 \div 80$)
- 340 fans** (0.85×400)
- 16 points** ($64 \div 4$)
- 62.5%** ($15 \div 24$)

Quick score

Page 1 problems	_____ / 8
A • Shot Chart	_____ / 4
B • Game Day Percents	_____ / 4
Total	_____ / 16

Skills practiced

Fractions to decimals

Decimals to percents

Percent of a number

Combined percentages

Percent increase

Comparing rates

Teaching tip: Have students estimate first: is 9 of 12 more or less than half? Checking that the answer makes sense catches most mistakes.