

Budget Math Lab

Find a weekly budget and the hourly wage a family needs.

GRADE 7 • TEKS 7.13.D

7.13.D "use a family budget estimator to determine the minimum household budget and average hourly wage needed for a family to meet its basic needs in the student's city or another large city nearby;"

NAME _____

DATE _____

WEEKLY BUDGET RULE

Add the weekly costs for basic needs to find the minimum household budget. Then divide that budget by the total hours all adults work in one week to find the average hourly wage needed.

WORKED EXAMPLE

A family needs \$1,120 each week for basic needs. The adults work 70 total hours each week. What average hourly wage do they need?

1. Minimum weekly budget = \$1,120.
2. Total work hours = 70.
3. $\$1,120 / 70 = \16 .

Answer: \$16 per hour

PRACTICE 4 problems

- 1** A budget estimator says a family needs \$840 each week. The adults work 70 total hours each week. What average hourly wage do they need?

ANSWER _____

- 2** A family's weekly basic costs are \$400 for housing, \$180 for food, \$120 for transportation, and \$100 for utilities. What is the minimum weekly household budget?

ANSWER _____

- 3** A family needs \$1,080 each week for basic needs and works 90 total hours each week. What average hourly wage do they need?

ANSWER _____

- 4** A family's weekly costs are \$350 for housing, \$150 for food, \$90 for transportation, and \$60 for utilities. The adults work 50 total hours each week. Find the minimum weekly budget and the average hourly wage needed.

ANSWER _____

APPLY IT Show your work

1

For a class project, Aiden uses a nearby city's family budget estimator. It lists weekly costs of \$540 for housing, \$210 for food, \$90 for transportation, \$120 for utilities, and \$80 for health care. The adults work 80 total hours each week. What minimum weekly budget and average hourly wage does the family need?

WORK SPACE

ANSWER _____

2

Jordan's family wants a work schedule that leaves time for Jordan's soccer practices. Their budget estimator says basic needs cost \$900 per week. One adult would work 30 hours and the other would work 45 hours. What average hourly wage would the family need?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A family estimates weekly basic costs of \$720 for housing, \$240 for food, \$120 for transportation, and \$120 for utilities. Under Schedule A, the adults work 75 total hours. Under Schedule B, they work 80 total hours. Find the minimum weekly budget and the hourly wage needed for each schedule. Which schedule requires the lower average hourly wage? Explain why.

WORK SPACE AND ANSWER

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A budget estimator says a family needs \$840 each week. The adults work 70 total hours each week. What average hourly wage do they need?	\$12 per hour
2	A family's weekly basic costs are \$400 for housing, \$180 for food, \$120 for transportation, and \$100 for utilities. What is the minimum weekly household budget?	\$800
3	A family needs \$1,080 each week for basic needs and works 90 total hours each week. What average hourly wage do they need?	\$12 per hour
4	A family's weekly costs are \$350 for housing, \$150 for food, \$90 for transportation, and \$60 for utilities. The adults work 50 total hours each week. Find the minimum weekly budget and the average hourly wage needed.	Minimum budget: \$650; average hourly wage: \$13 per hour

PART 2 • APPLY IT

1. **Minimum budget: \$1,040; average hourly wage: \$13 per hour** Add the five weekly costs to get \$1,040. Divide \$1,040 by 80 hours to get \$13 per hour.
2. **\$12 per hour** Add the work hours, $30 + 45 = 75$. Divide \$900 by 75 to get \$12 per hour.

CHALLENGE

Minimum weekly budget: \$1,200. Schedule A: \$16 per hour. Schedule B: \$15 per hour. Schedule B requires the lower wage because the same \$1,200 budget is divided among more work hours.

Accept equivalent wording such as "\$12 an hour." Students should add all listed weekly basic costs before dividing by the combined weekly work hours.