

Payoff Path

Build a debt payoff plan.

HIGH SCHOOL • MA.912.FL.3.11

MA.912.FL.3.11 "Given a real-world scenario, establish a plan to pay off debt."

NAME _____

DATE _____

PLAN THE PAYOFF

When no new interest is added, divide the balance by the number of months to find a monthly payment. A larger payment shortens the plan, and comparing total paid shows the cost of a longer plan.

WORKED EXAMPLE

A \$840 balance has no new interest. You will pay \$70 each month. How long will the plan take?

1. Months = $840 / 70$.

2. Months = 12.

3. Pay \$70 each month for 12 months.

Answer: \$70 per month for 12 months

PRACTICE 5 problems

- 1** You owe \$560 with no interest. If you pay \$40 each month, how many months will it take?

ANSWER _____

- 2** A \$675 balance must be paid off in 9 months. What monthly payment is needed?

ANSWER _____

- 3** A \$1,170 balance is paid at \$90 each month. How many months will the plan take?

ANSWER _____

- 4** A \$500 debt is repaid in 11 payments of \$52. How much interest is included in the payments?

ANSWER _____

- 5** A \$630 balance has no interest. Plan A pays \$63 each month. Plan B pays \$45 each month. Which plan ends sooner, and by how many months?

ANSWER _____

APPLY IT Show your work

- 1** Jordan owes \$1,155 for a driver's education course. No interest will be added. Jordan wants the debt gone in 11 months. What monthly payment should Jordan put in the plan?

WORK SPACE

ANSWER _____

- 2** A \$1,050 gaming laptop was bought on credit. Plan A is \$75 per month for 15 months, for a total of \$1,125. Plan B is \$50 per month for 24 months, for a total of \$1,200. If both payments fit the budget, which plan costs less, and how much does it save?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

You owe \$1,000 with no interest and want it paid off in 8 months. You can pay \$95 each month for the first 4 months. What equal monthly payment is needed for the final 4 months?

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	You owe \$560 with no interest. If you pay \$40 each month, how many months will it take?	14 months
2	A \$675 balance must be paid off in 9 months. What monthly payment is needed?	\$75 per month
3	A \$1,170 balance is paid at \$90 each month. How many months will the plan take?	13 months
4	A \$500 debt is repaid in 11 payments of \$52. How much interest is included in the payments?	\$72
5	A \$630 balance has no interest. Plan A pays \$63 each month. Plan B pays \$45 each month. Which plan ends sooner, and by how many months?	Plan A, by 4 months

PART 2 · APPLY IT

1. **\$105 per month** Divide \$1,155 by 11. The result is \$105, so paying that amount each month reaches the goal.
2. **Plan A costs less and saves \$75.** Compare the total costs: $\$1,200 - \$1,125 = \$75$. Plan A also ends 9 months sooner.

CHALLENGE

\$155 per month

Accept equivalent wording for the payment plans, as long as the amount and time are correct. For the challenge, accept correct work showing the remaining balance is divided among the final payments.