**Task card 1** Properties of Logarithms

Fill in the blank: $\log_2(32x) = ___ + \log_2(x)$

**Task card 2** Properties of Logarithms

Evaluate: $\log_6(4) + \log_6(9)$

**Task card 3** Properties of Logarithms

Write as a single logarithm: $\log_7(y) + \log_7(3)$. (Write the number first, like $\log_2(3x)$.)

**Task card 4** Properties of Logarithms

Evaluate: $\log_2(14) - \log_2(7)$

**Task card 5** Properties of Logarithms

Use $\log(2) \approx 0.301$ and $\log(3) \approx 0.477$ to find $\log(12)$ without a calculator.

**Task card 6** Properties of Logarithms

Evaluate: $2\log_2(4)$

**Task card 7** Properties of Logarithms

Write as a single logarithm: 2log_2(y) - $\log_2(7)$

**Task card 8** Properties of Logarithms

Evaluate: $\log_4(2) + \log_4(32)$

**Task card 9** Properties of Logarithms

Write as a single logarithm: 2log_3(y) - $\log_3(7)$

**Task card 10** Properties of Logarithms

Use log(2) ≈ 0.301 and log(3) ≈ 0.477 to find log(18) without a calculator.

**Task card 11** Properties of Logarithms

Evaluate: $\log_3(21) - \log_3(7)$

**Task card 12** Properties of Logarithms

Write as a single logarithm: $\log_3(x) + \log_3(11)$. (Write the number first, like $\log_2(3x)$.)

**Task card 13** Properties of Logarithms

Evaluate: $\log(2) + \log(5)$

**Task card 14** Properties of Logarithms

Fill in the blank: $\log_5(25m) = ___ + \log_5(m)$

**Task card 15** Properties of Logarithms

Write as a single logarithm: $\log_2(y) + \log_2(3)$. (Write the number first, like $\log_2(3x)$.)

**Task card 16** Properties of Logarithms

Write as a single logarithm: $\log_2(x) + \log_2(3)$. (Write the number first, like $\log_2(3x)$.)

**Task card 17** Properties of Logarithms

Use $\log(2) \approx 0.301$ and $\log(3) \approx 0.477$ to find $\log(20)$ without a calculator.

**Task card 18** Properties of Logarithms

Evaluate: $\log_3(90) - \log_3(10)$

**Task card 19** Properties of Logarithms

Write as a single logarithm: $\log_5(x) + \log_5(3)$. (Write the number first, like $\log_2(3x)$.)

**Task card 20** Properties of Logarithms

Use $\log(2) \approx 0.301$ and $\log(3) \approx 0.477$ to find $\log(16)$ without a calculator.

**Task card 21** Properties of Logarithms

Fill in the blank: $\log_2(y^2) = ___ \cdot \log_2(y)$

**Task card 22** Properties of Logarithms

Write as a single logarithm: 5log_2(x) - $\log_2(3)$

**Task card 23** Properties of Logarithms

Fill in the blank: $\log_5(m^9) = ___ \cdot \log_5(m)$

**Task card 24** Properties of Logarithms

Evaluate: $\log_{12}(9) + \log_{12}(16)$

# Properties of Logarithms Task Cards

Recording sheet · Grade 11 · Use the properties of logarithms.

Name: _____ Date: _____

Scan to check your answers

| | | | |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 |

# Properties of Logarithms Task Cards: Answer Key

Grade 11 · Medium

The answers online

| | | |
|---|---|---|
| **1.** 5 | **2.** 2 | **3.** $\log_7(3y)$ |
| **4.** 1 | **5.** 1.079 | **6.** 4 |
| **7.** $\log_2(y^2/7)$ | **8.** 3 | **9.** $\log_3(y^2/7)$ |
| **10.** 1.255 | **11.** 1 | **12.** $\log_3(11x)$ |
| **13.** 1 | **14.** 2 | **15.** $\log_2(3y)$ |
| **16.** $\log_2(3x)$ | **17.** 1.301 | **18.** 2 |
| **19.** $\log_5(3x)$ | **20.** 1.204 | **21.** 2 |
| **22.** $\log_2(x^5/3)$ | **23.** 9 | **24.** 2 |