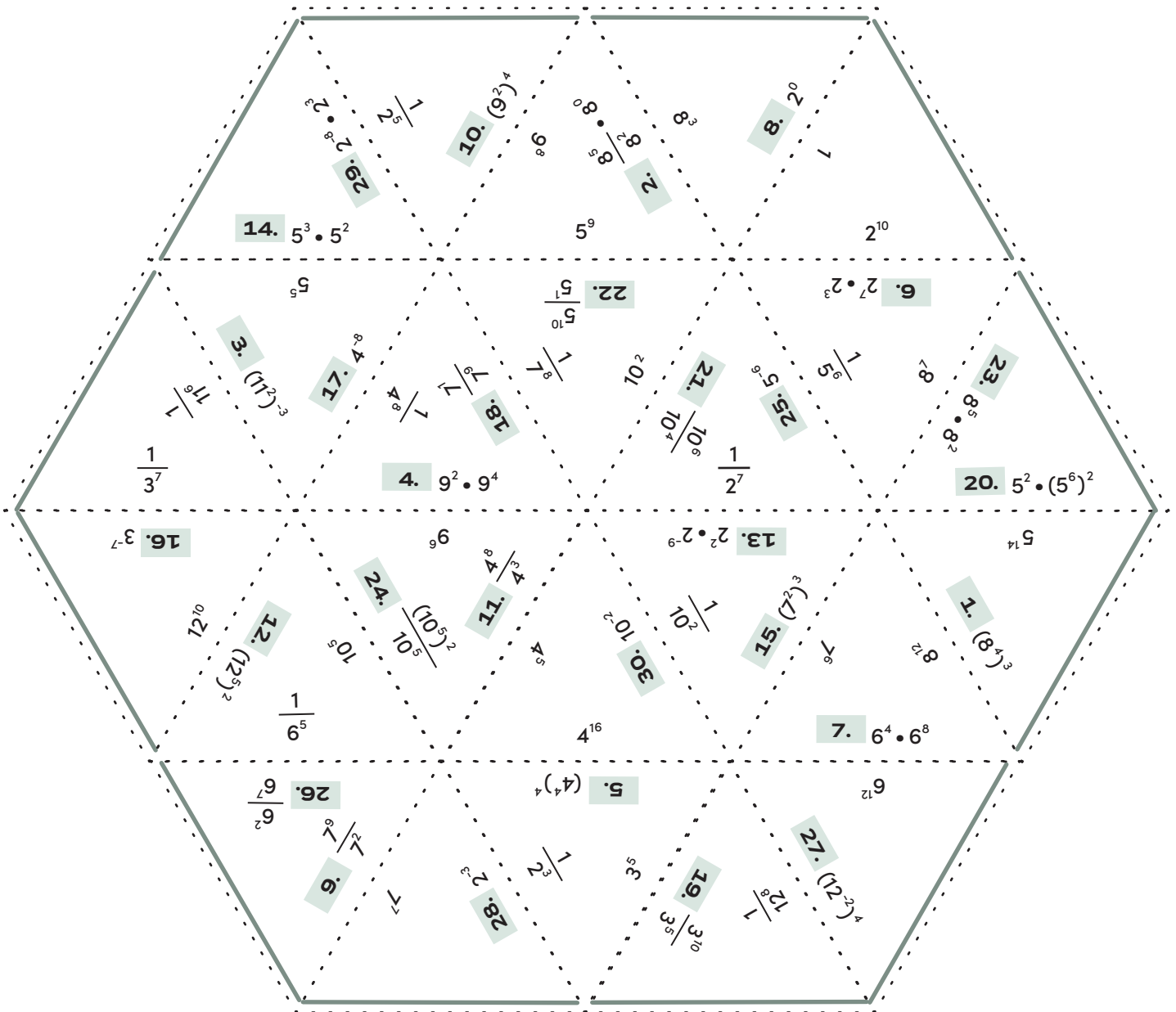


# Properties of Exponents Puzzle



# Properties of Exponents Recording Sheet

Show your work  
and record the simplified  
expressions below.

<b>1.</b> $(8^4)^3 = 8^{12}$	<b>2.</b> $\frac{8^5}{8^2} \cdot 8^0 = 8^3$	<b>3.</b> $(11^2)^{-3} = \frac{1}{11^6}$
<b>4.</b> $9^2 \cdot 9^4 = 9^6$	<b>5.</b> $(4^4)^4 = 4^{16}$	<b>6.</b> $2^7 \cdot 2^3 = 2^{10}$
<b>7.</b> $6^4 \cdot 6^8 = 6^{12}$	<b>8.</b> $2^0 = 1$	<b>9.</b> $\frac{7^9}{7^2} = 7^7$
<b>10.</b> $(9^2)^4 = 9^8$	<b>11.</b> $\frac{4^8}{4^3} = 4^5$	<b>12.</b> $(12^5)^2 = 12^{10}$
<b>13.</b> $2^2 \cdot 2^{-9} = \frac{1}{2^7}$	<b>14.</b> $5^3 \cdot 5^2 = 5^5$	<b>15.</b> $(7^2)^3 = 7^6$
<b>16.</b> $3^{-7} = \frac{1}{3^7}$	<b>17.</b> $4^{-8} = \frac{1}{4^8}$	<b>18.</b> $\frac{7^1}{7^9} = \frac{1}{7^8}$
<b>19.</b> $\frac{3^{10}}{3^5} = 3^5$	<b>20.</b> $5^2 \cdot (5^6)^2 = 5^{14}$	<b>21.</b> $\frac{10^6}{10^4} = 10^2$
<b>22.</b> $\frac{5^{10}}{5^1} = 5^9$	<b>23.</b> $8^5 \cdot 8^2 = 8^7$	<b>24.</b> $\frac{(10^5)^2}{10^5} = 10^5$
<b>25.</b> $5^{-6} = \frac{1}{5^6}$	<b>26.</b> $\frac{6^2}{6^7} = \frac{1}{6^5}$	<b>27.</b> $(12^{-2})^4 = \frac{1}{12^8}$
<b>28.</b> $2^{-3} = \frac{1}{2^3}$	<b>29.</b> $2^{-8} \cdot 2^3 = \frac{1}{2^5}$	<b>30.</b> $10^{-2} = \frac{1}{10^2}$