

NAME: _____

1. Given $\log_{10} 7 = X$ and $\log_{10} 5 = Y$, find $\log_{10} 35$.
[A] XY [B] 10^{XY}
[C] 10^{X+Y} [D] $X + Y$
2. Given $\log_{10} 2 = S$ and $\log_{10} 3 = T$, find $\log_{10} 6$.
[A] 10^{ST} [B] 10^{S+T}
[C] $S + T$ [D] ST
3. Given $\log_{10} 11 = P$ and $\log_{10} 7 = Q$, find $\log_{10} 77$.
[A] PQ [B] $P + Q$
[C] 10^{P+Q} [D] 10^{PQ}
4. Given $\log_{10} 5 = V$ and $\log_{10} 2 = W$, find $\log_{10} 10$.
[A] $V + W$ [B] 10^{VW}
[C] 10^{V+W} [D] VW
5. Given $\log_{10} 3 = M$ and $\log_{10} 11 = N$, find $\log_{10} 33$.
[A] $M + N$ [B] MN
[C] 10^{M+N} [D] 10^{MN}
6. Given $\log_z 5 = 0.774$ and $\log_z 7 = 0.936$, find $\log_z 35$.
[A] 0.162 [B] 1.710
[C] 0.724 [D] 2.724
7. Given $\log_z 7 = 1.209$ and $\log_z 11 = 1.490$, find $\log_z 77$.
[A] 2.699 [B] 3.801
[C] 1.801 [D] 0.281
8. Given $\log_z 11 = 1.338$ and $\log_z 5 = 0.898$, find $\log_z 55$.
[A] 2.236 [B] 3.202
[C] 1.202 [D] 0.440
9. Given $\log_z 2 = 0.356$ and $\log_z 11 = 1.232$, find $\log_z 22$.
[A] 0.876 [B] 1.588
[C] 0.439 [D] 2.439
10. Given $\log_z 5 = 1.000$ and $\log_z 7 = 1.209$, find $\log_z 35$.
[A] 2.209 [B] 3.209
[C] 0.209 [D] 1.209

[1] D _____

[2] C _____

[3] B _____

[4] A _____

[5] A _____

[6] B _____

[7] A _____

[8] A _____

[9] B _____

[10] A _____