

```

In[331]:= PrimePowerPi[x_] := (
  y = Flatten[Union[Table[Prime[Range[PrimePi[x^(1/b)]]]^b, {b, 1, Floor[Log[2, x]]}]]];
  Length[Select[y, Function[z, z <= x]]])

PrimePowerPi[10]
PrimePowerPi[200]
PrimePowerPi[10^5]
PrimePowerPi[10^7]
PrimePowerPi[10^8]

Out[332]= 7

Out[333]= 60

Out[334]= 9700

Out[335]= 665 134

Out[336]= 5 762 859

```