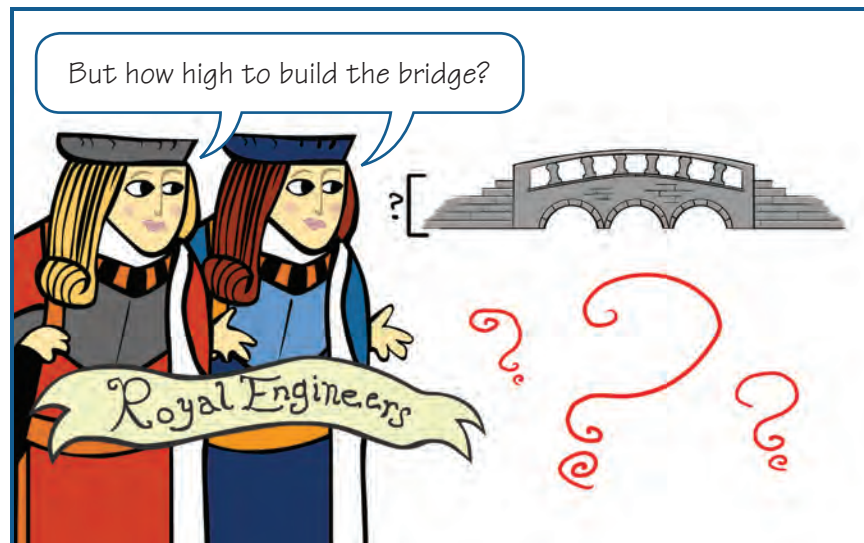
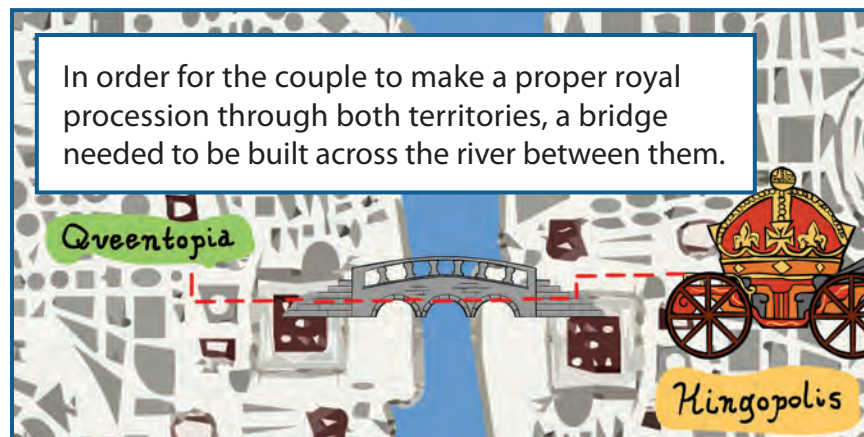




Once upon a time, the king from Kingopolis and the queen from Queentopia fell madly in love and decreed they would marry.

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The king and queen discussed it and agreed that 12 feet high was a noble height for a bridge.



Make it so!

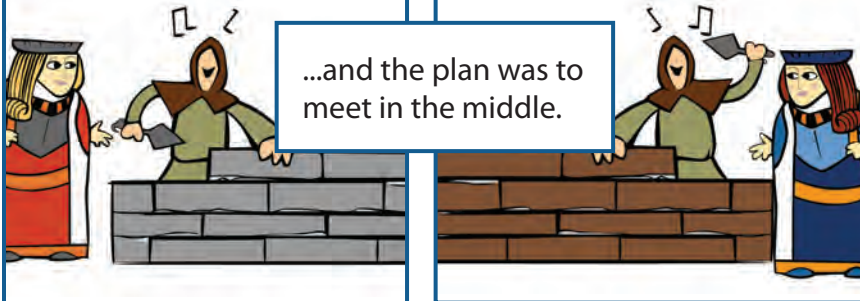
Oh yes, quite right. Make it so.



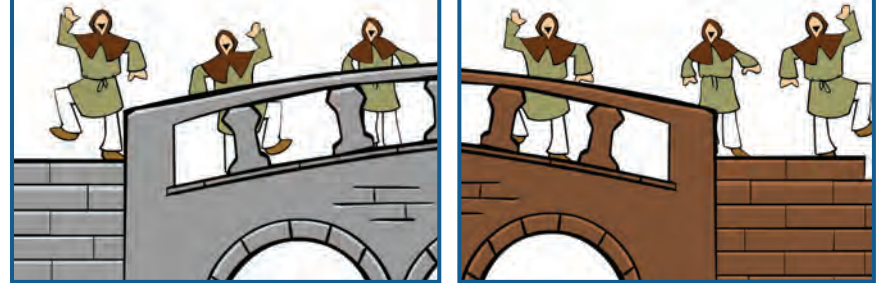
The queen's engineers began building from Queentopia...

...the king's engineers from Kingopolis...

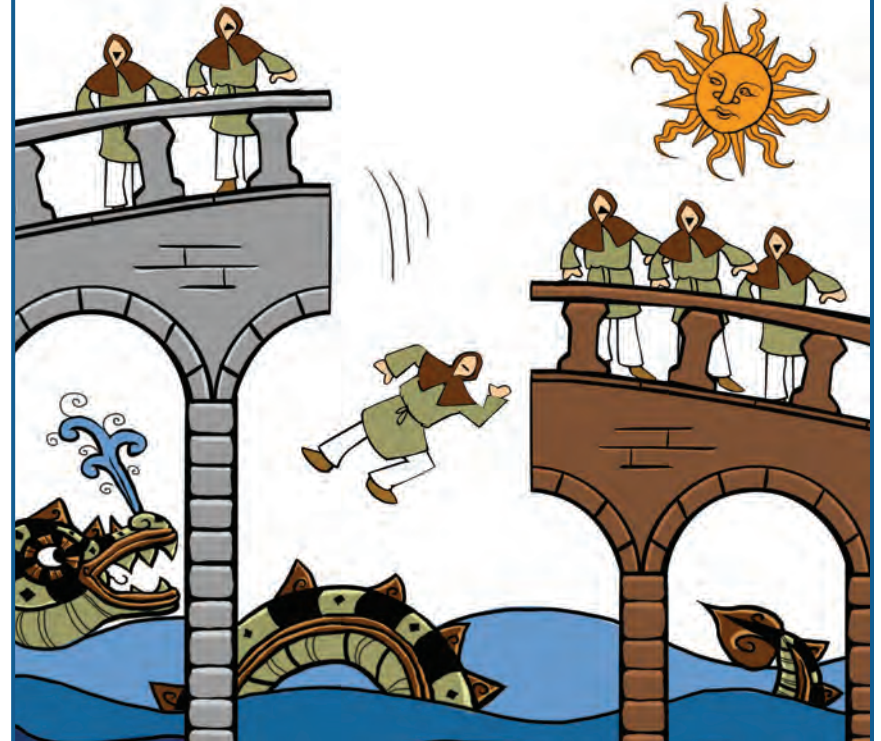
...and the plan was to meet in the middle.



All was merriment and joy in anticipation, for the king and queen decided that they would marry upon the day of completion.



Alas, it was not long before discord was introduced to the land. For as the bridge neared completion, the peoples began to realize that each side of the bridge was not of the same height.

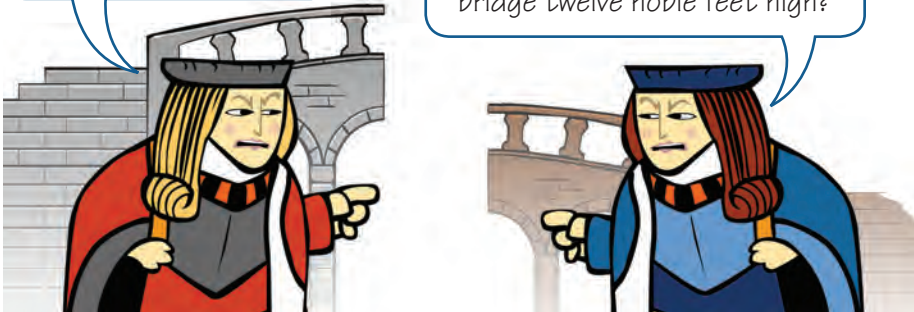


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As is usual in these matters, they began to blame each other.

Why have you not built the bridge twelve noble feet high?"

What?! Of course we have. Why have you not built the bridge twelve noble feet high?"



Things went back and forth like this until it got nasty.



Someone from Kingopolis said something about someone from Queentopia's mother, and, well, before you know it everyone was at each other's throats over the whole thing.



The king and queen were dismayed and worried that their union must be renounced to save the peace.



Worse, the bridge left a lot to be desired.



Oh, woe is me, what shall we do?"



In grief, and head hung low, he noticed how terrible his feet looked.



So he decided to calm himself with a pedicure.

Oh drat and confound! This situation and my toes are in a terrible state,"

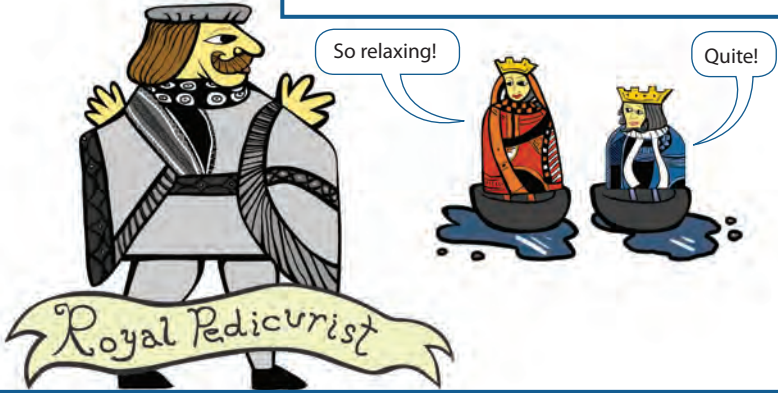


She also decided on a pedicure.

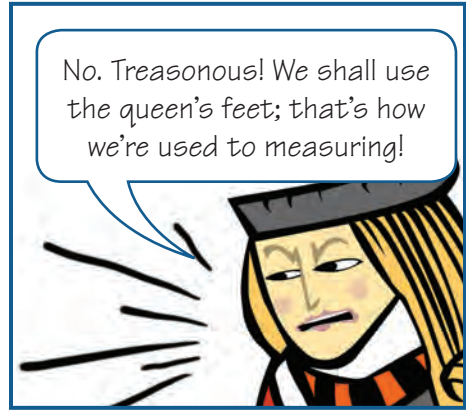
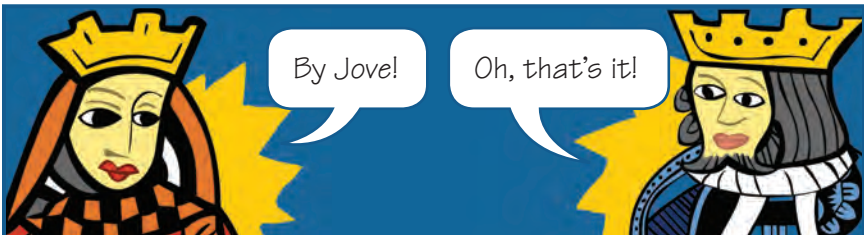


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And good thing, too, for whilst the royal pair were soaking their royal bunions the royal pedicurist solved the problem.



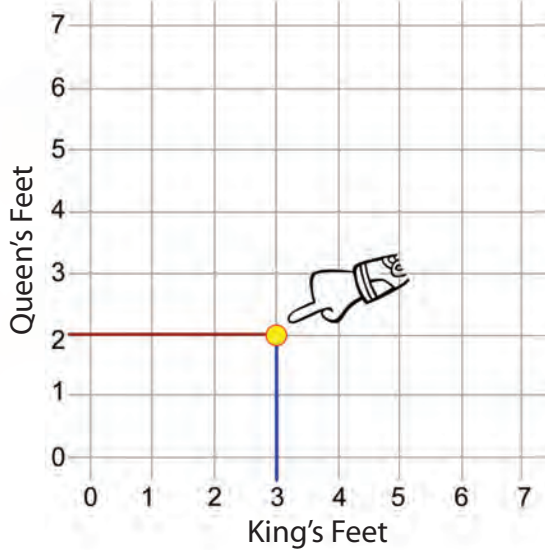
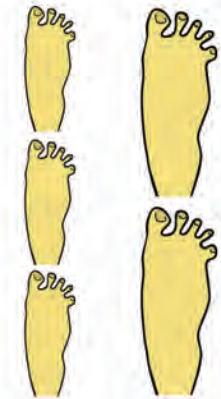
He remembered that in these lands they measured a foot by the actual size of their king's or queen's foot.



We just need to know how to convert to each other's units of measurement.

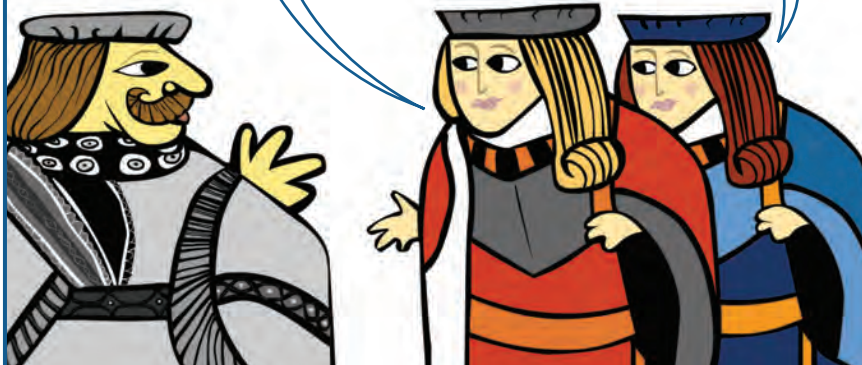
You see, **two** queen's feet is the same as **three** king's feet.

### King's Feet vs. Queen's Feet



Yes, but how does that help us?

We need to know how many queen's feet is **twelve** king's feet.

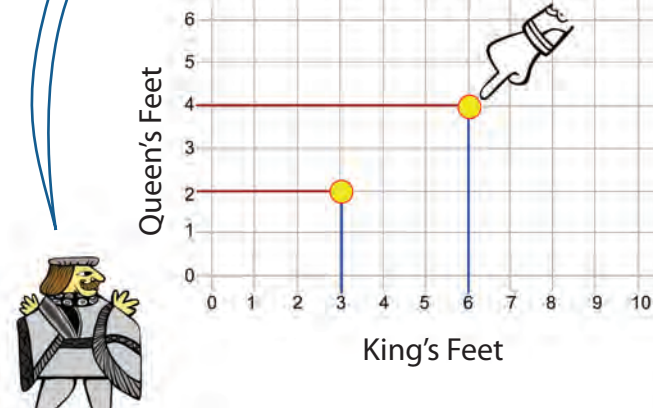


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And **four** queen's feet is the same as **six** king's feet.

That's no help! We need to know how many king's feet is **twelve** queen's feet.

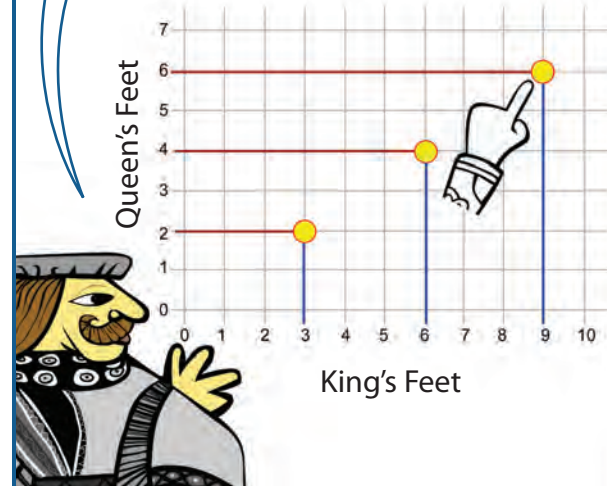
### King's Feet vs. Queen's Feet



And, **six** queen's feet is the same as **nine** king's feet.

Oh that's not helpful! Why are you telling us this?

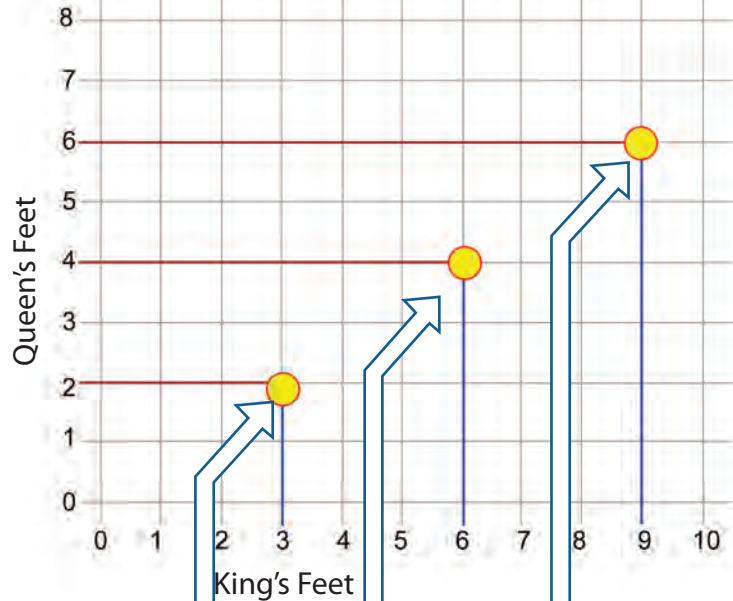
### King's Feet vs. Queen's Feet



Please bear with me. Now, you see, we can plot this information on a graph.



### King's Feet vs. Queen's Feet



Two queen's feet equals **three** king's feet,

four queen's feet equals **six** king's feet,

and **six** queen's feet equals **nine** king's feet.

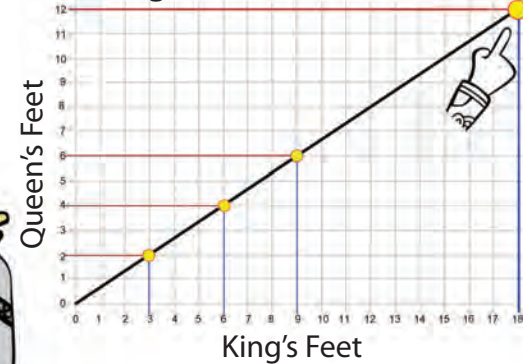


Now, your majesties, you'll see that there is a pattern here. These points actually form a straight line.

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If we follow the line over to **twelve** queen's feet, we see that **twelve** queen's feet equals **eighteen** king's feet.

### King's Feet vs. Queen's Feet

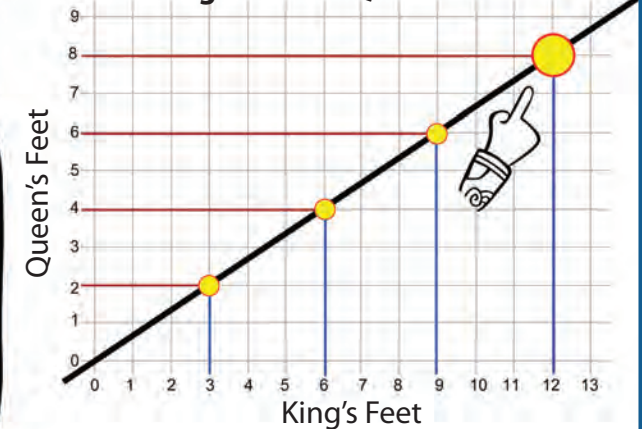


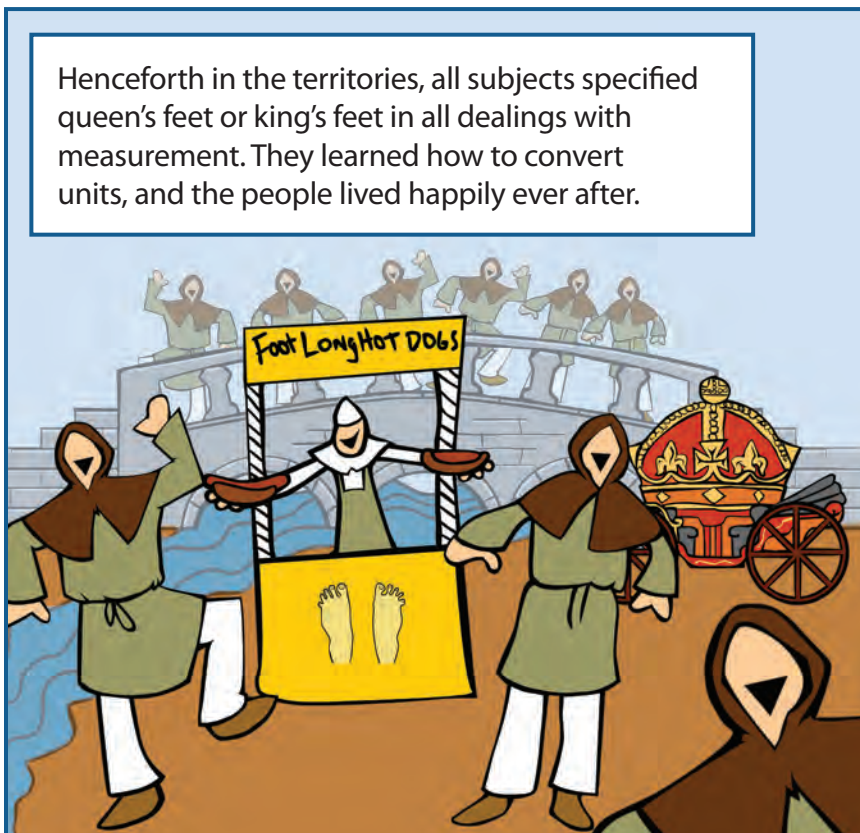
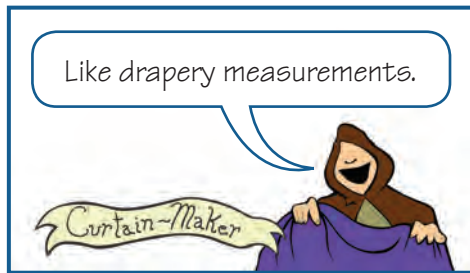
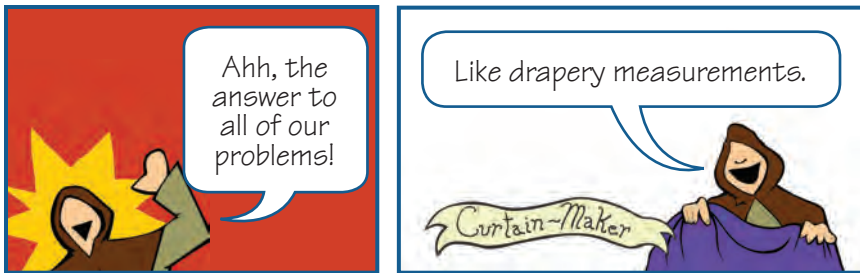
Oh yes, but what if we want to know how many queen's feet is **twelve** king's feet?



Oh, I know! Just follow the line up to **twelve** king's feet. It looks like **twelve** king's feet is the same as **eight** queen's feet.

### King's Feet vs. Queen's Feet





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